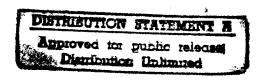
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Soviet Union Economic Affairs

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ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

Readers Suggest Ways to Improve Economy 18200359 Moscow PRAVITELSTVENNYY VESTNIK in Russian No 8, Apr 89

[Article by Yu. Rytov: "Work, Ruble! Our Newspaper's Readers Reflect on Ways To Effect the Nation's Financial Recovery"]

[Text] I have a thick stack of letters before me—more than 100—received during the last two weeks. All of them are more or less dedicated to the important social and economic problem which the editors have submitted for discussion: The problem of the nation's financial recovery (see the article "How Is Your Health, Economy?" PRAVITELSTVENNYY VESTNIK, No 4.).

I must state immediately: Far from all of the opinions are of an argumentative nature and some are simply based on emotions and not on facts. But this is not the essence of the matter. The main thing is that people have perceived the nation's financial recovery program as their real cause and want to directly participate in it.

The mail is evidence that: the measures developed by the government have been met with total approval. "I am a simple man, a worker," writes P. Krilus from Krasnodar, for example, "but, having found out about the program adopted, I clearly sensed the consistency of our actions in the struggle for restructuring the economy. I think that this information will help to end various narrow-minded rumors and gossip..."

We can divide the mail into two major themes. The first theme: Decisively curtail wasteful expenditures and struggle with all types of waste and mismanagement. And the second theme: Increase the effectiveness of all spheres of production and strengthen the economy's social orientation in every possible way.

All of this is correct. This is what the financial recovery program was intended to do. On one hand, we must reduce expenditures and not squander any more money. On the other hand, we need to force each ruble to work harder and get more of a return from it. And then we will more rapidly saturate the market with goods and the treasury will overflow with profits. And then it will not be necessary to further tighten our belts...

Just what are our readers specifically proposing?

Only Through Work...

The economy's effectiveness depends on the remuneration system to a great degree. Many letters bitterly state that unwarranted wage leveling still persists in our society, unearned profits exist, and the rubles paid to people far from always correspond to their real contributions to production. "Money must be earned." This is how B. Goncharuk, chief production engineer of the Elektronmash Production Association (Chernovtsy), titled his letter. He is attempting to analyze just how this curious financial phenomenon recently arose in our national economy and precisely why wage increases began to outstrip the productivity of labor. And although we can hardly call his analysis exhaustive, he sheds definite light on this phenomenon.

All managers, asserts the author, know well the requirements set forth in the USSR Council of Ministers and VTsSPS [All-Union Central Trade Union Council] resolution No 540 of 6 June 1985 "On Measures for Improving Labor Standards in the Economy." They know them but they do not always carry them out. The requirement is quite precisely set forth in the resolution: "Measures for improving the quality of labor standards and the broad application of progressive norms and standards are aimed at ensuring economically based correlations between the growth of the productivity of labor and wages."

They have directed [their efforts] sort of correctly, points out the author, but how many blunders there have been in practice! And he provides an example...

Workers paid an hourly rate are paid exactly as much as some shop or section chief can "knock together" for them at the enterprises' regular wage rates. They have stopped managing the service norms for auxiliary workers and the standards for their numbers. And these workers must really be assigned standard tasks with an indicator in them of the content and volume of work, the service zones, and time limits for fulfilling tasks proceeding from the technically based norms and standards for labor input. In reality, standard tasks are not being established and if they have been prescribed somewhere, they are for the sake of formality.

Yes and grouping hourly workers according to wage scales is conducted formally: Their wage ratings more often than not exceed the wage ratings of the work they actually perform. This category of workers has become the most highly wage-rated: Collectives actually compete among themselves to award high ratings to retain people in place. The result? Unearned money is being paid, the growth of the productivity of labor has slowed, and an artificial shortage is being created in the work force...

Furthermore, "high priority work" supplemental payments have become widely used at enterprises. In the letter writer's opinion, very often not high priority but the most routine work qualifies, paid at the "priority" rate only for the sake of saving the plan.

And finally, it is assumed that reserves have been found while transitioning to new wage contracts and, as a rule, a portion of the personnel have been released. However, even this assumption, asserts the author, does not entirely correspond to reality. Assets for raising wage

scales and salaries have sometimes "been found," reducing vacancies, after which, having properly completed the documents, they have begun to pay money which had not been earlier stipulated by the plans.

B. Goncharuk comes to the conclusion that: "Supporting the untenable situation that we need to unswervingly comply with an economically based correlation between the growth of the productivity of labor and wages, I think it is advisable to establish control, not only of the correlation, but also of wage validity by category of worker."

A. Tolstoy, an engineer by profession and one of our readers from the village of Boguchana in Krasnoyarsk Kray, also refers to the imperfection in the wage system in industry. In his view, the average proportion of the wage rate on the average monthly worker's wage is falling catastrophically despite all of the official directives. In the forestry industry, the author asserts, wage rate salaries take up 15-20 percent. And just where does the remainder come from? From all types of prizes and bonuses: "sliding scale payments" up to 100 percent of the piece-work wage, "night" and "ranking" differentials, etc. It is easy to understand: under these conditions, the real results of labor, outshined by a multitude of additional wage factors, are of secondary importance.

This wage scale is so complex that it is simply incomprehensible to many people. In the forestry industry, for example, there are more than one hundred wage scales in use and the list of official duties and qualifications has hundreds of designations. For example, tree limb trimmer, stacker, roller, and sling loader, etc. And the most curious thing is that there is no way to divide such operations in the actual technological process. Thus the notorious "unwarranted wage-leveling," "unwarranted pay and bonus levels," and similar defects arise which deprive producers of a real stimulus toward honest labor...

Reader A. Tribelgorn from Krasnodar Kray directs our attention to another aspect of this same problem: The salary system for engineers and technical workers—"salaried workers" as he calls them. In the author's opinion, the system of guaranteed salaries has become obsolete under cost accounting and self-financing conditions. For certain specialists, the guaranteed ruble serves as the basis for a carefree existence while poorly performing their duties and being indifferent to the end results of the collective's work.

What can we say regarding these letters? One thing, obviously: Cost accounting has still not penetrated into all sectors of our production life and has not been fully implemented both at work sites and at specialists desks. In this regard, a number of economists are placing their hopes on the second cost accounting model. Yes, it is capable of turning a lot of things upside down. But under one condition: If an economically based correlation of

the growth of wages and productivity of labor is complied with even here. Otherwise, no model, no matter how theoretically attractive it may be, can withstand the test of time.

Reduction of the Management Apparatus

This problem—reduction of the management apparatus—also turned out to be at the center of attention of our readers who are fighting for the nation's financial recovery. Thus, A. Morya from Moscow Oblast began his letter with the categorical assertion: "To remove barriers on the path of perestroyka, we must eliminate all sector ministries and departments and repeal their legally-based acts and regulations."

It is true that the author introduced one essential clarification here: "I consciously let the word 'immediately' slip by for I needed to give something instead of it. It is going to be extremely difficult to resolve all of the national economy's management functions at the current stage. This is something that must meet all of the new forms of economic reform and relations which are forming both during the current period and the future [relations] for the subsequent period. Who is going to interfere with us, for example, in establishing coordination centers (union, republic, oblast, etc.) for managing production processes equipped with modern equipment assets? Such centers, under the aegis of USSR Gosplan State Committee for Planning], will carry out all functions inherent to ministries and will not allow any sort of anarchy..."

Decisively supporting the author's opinion on the danger of rash decisions, I would like to direct his attention to two circumstances. The first is that there is no way that a reorganization of the management apparatus can be reduced to transferring functions from one institution to another. In that case, we would only be changing the signboards. We need to change the functions themselves. There are lively polemics going on right now in the press in this regard and we all know that its participants have not arrived at a common opinion. In reality, someone must decide the strategic tasks for developing sectors, ensuring technical and technological breakthroughs, and introducing progressive and economic work methods. Yes, the existing management structure cannot deal with these tasks. But what will we replace it with? This question remains open for now.

And the second circumstance. The high level management reorganization process is progressing quite actively now. As PRAVITELSTVENNYY VESTNIK (No 6, page 4) has already reported, the management apparatus of ministries, departments, soviet and administrative organs has been reduced by 545,000 people. But, is it not paradoxical that the total numerical reduction of managers has not occurred. On the contrary, their numbers have increased by 667,000 people. Due to what? Due to managers at enterprises and organizations who are

directly involved in the production sphere. And, according to a number of our readers, this growth is occurring without any weighty basis for it.

Here is a letter from V. Simonov, chief engineer of the Pavlodar Tractor Plant's development and production training section. He has been working at this enterprise since 1964. And his letter begins with an evaluation of the state of affairs at the plant. "As long as I can remember, this plant has never operated steadily or rhythmically. There were always rush jobs, overtime, and calling in everyone and everything to the main shops for fulfilling the plan. Nevertheless, for the last two years (1987, 1988) the association could not handle the task. There are many reasons for this but one of the main ones is personnel."

At the plant, the author further clarifies, is a whole army of engineers and technical workers—more than 3,000 people. But how many people are there among them who are only filling engineering positions that in no way correspond to their education, the nature of their work, or their real contribution to production. There is, for example, a secretary-typist who fills an engineering position. There is a consultant who is filling a first category engineer-designer position with a 280-ruble salary. Thus, is anyone surprised that for over 20 years not one new model of tractor has been developed by the enterprise's designers and that not one new consumer item of the plant's own design has been introduced into production?

There are 18 people in the section where the author works. "There is, naturally, both a chief and a deputy, and two bureau chiefs. There is also an archivist (fills the position of engineer-technologist) and a secretary-typist (engineer-technologist). And the result? A lot of bustle, various papers, and little useful work."

It is possible that the author made things out to be a bit worse than they really are. However, there is no doubt that we could find unproductive sections in the management structures of many enterprises. We must agree with words V. Simonov uses to summarize his letter: "Everything must be subordinated to one thing: People must get paid for work and the one who does more should get paid more."

What and How to Build

The letter from I. Borovkov, senior lecturer at the Voronezh Engineering and Construction Institute, is dedicated to the problems of capital construction. He very resolutely supports the measures adopted for reducing their capacities in Group A within the framework of the nation's financial recovery program and proposes compensating for that reduction by increasing the work shifts at existing enterprises. And, as an additional measure for increasing production output capacity, he

recommends organizing labor societies for the collective's workers who have expressed a desire to work an additional 2-4 hours per day. These societies will lease production assets at the enterprise during a free shift.

In the author's opinion, the scale of home construction needs to be sharply increased at the same time. All of the capabilities exist to do this. We only need to ensure that we more actively attract the population's assets to these goals. Aside from the further development of cooperative and individual construction by traditional means, we should organize home construction consortiums under oblast and municipal ispolkoms [executive committees] which unite the efforts of banks, state construction organizations, and cooperatives in the search for financial resource, creation of production capabilities, construction, and sale of completed homes. The assets of the population and enterprises could simultaneously be attracted through issues of securities and paying off debt obtained through sales of completed homes.

The author suggests completely transitioning to accounting for facilities, lines, and launch systems being entered into operation in the construction system and paying for all intermediate work stages through bank credits.

- I. Boronkov's letter analyses conditions for totally transitioning all construction organizations from the first cost accounting model to the second with wide use of leasing and cooperative contracts. The author thinks it is entirely possible to reduce the second model's cost accounting principles to each work team and functional service with remuneration of all leaders, specialists, and workers depending on the end results—entry of the facility into operation and cost accounting profits.
- B. Medzhidov from Nebit-Dag touches upon the state of affairs in capital construction in his letter. "First of all," he thinks, "we need to compare our needs with our capabilities. A thorough analysis of the material base of construction material and equipment output is needed for planned facilities. And include only those facilities in the plan which we can provide both capital investments and the necessary physical assets for in accordance with construction duration norms."

This reader is undoubtedly correct. And here we need to point out that it is precisely these principles—provision of capital investments, design and budgetary documentation, and material-technical resources—that should be given top priority by the planning agencies as the basis for new construction prospect analysis.

Touching on that timely theme, reader A. Pritsker from Moscow emphasizes the need for intra-departmental expertise of major economic projects. We need to trust our author that this practice is already widely being applied and that the basic decisions on these projects are being made only after comprehensive consultation with a broad range of experts.

Having Computed—And Not Having Shed Any Tears...

The following major group of issues, having found reflection in letters to the editor and having a direct relation to the realization of the financial recovery program are—the struggle with mismanagement and losses.

Reader A. Vlasov from Irkutsk Oblast discusses the physical assets "belonging to no one" which you can find in abundance alongside any structure or any enterprise. There are both lumber and sheet metal, steel-reinforced concrete items, bricks, mechanisms, and equipment. All of it is rusting, rotting, and becoming unusable.

A.V. Lanskikh from Kurgan sees the same dismal picture of mismanagement from a somewhat different perspective. "Drop by Vtorchermet Square," he writes, "and you will catch the entire dramatic effect of the situation. Just what is not here! New plows, coils of wire marked with plant identification tags, KrAZ [Kremenchug Automobile Plant] and MAZ [Minsk Automobile Plant] front and rear axle assemblies... Farm equipment, with its warranty period still valid, is being written off and turned into scrap metal for the smelter!"

Moscow resident L. Nikolayev's letter reminds us of the colossal losses during transport, storage, and processing of agricultural products. In her letter, M. Sidorova from Odessa talks about the reserves of valuable physical assets in excess of standards which have been accumulated at many enterprises. K. Soinova from the city of Kyzyl discusses inflated reporting which she still encounters in certain managers practices. N. Nevolko from the city of Glukhov in Sumy Oblast describes the losses of work time caused by the low level of labor discipline... Yes, according to official data, wasteful expenditures and losses as a whole exceed 24 billion rubles per year throughout the national economy. This is a colossal figure! I recall that the government budget deficit (the excess of expenditures over income) now totals 35 billion rubles. (Incidentally, certain readers ask why alternative versions have appeared in PRAVITELSTVENNYY VESTNIK and other press agencies: there the deficit is determined to be approximately 100 billion rubles. This is all quite simple: Certain authors also include sums borrowed from the government loan fund here-63.8 billion rubles. In my view, this is not altogether methodologically correct: Although this money must also be returned, it really exists and really participates in [money] turnover.)

But let us return to waste and losses. That very fact which we are talking about: We calculated and shed a few tears. It really is easy to understand: Reduction of losses and waste is equivalent to a corresponding increase in the revenue portion of the budget.

How did things turn out that way? Unfortunately, our readers' recommendations do not go beyond the bounds of a simple desire to place things in order. But how do we

attain this? Once again turn on all of the administrative and command levers at their full power? Or improve the economic mechanism even further and deepen economic accounting? I am convinced that only the second path is promising. Only cost accounting and restructuring of production relations in all spheres of the economy are capable of returning the lost feeling of being the proprietor to man and encouraging him to zealously use everything—both money, physical assets, and work time.

To Know-Means To Be Able

We can hardly place improvement of the economic mechanism within definite temporary limits. In essence, this process is not only complicated and prolonged—it is constant. Life itself will always be introducing corrections to our management forms and methods, rejecting useless ones and accepting effective ones. Our readers direct attention to several conditions under which this process will be quite intensively occurring.

"During the years of perestroyka," writes A. Lunkin from Tolyatti, "quite a few new legislative acts have been adopted which are directed at economic recovery. But some of them either do not work, work poorly, or do not always provide the desired results. One of the reasons for this, in my view, is poor economic training of the workers. To be a full-fledged proprietor, we need to at least precisely act like a proprietor in all aspects. Both as a manager, a team leader, and as a worker. Otherwise, how can there be a common vested interest in high end results of the whole collective's labors?"

The author explains his thought through this simple example. "Sometimes you ask a worker who has transitioned to the new form of management: 'What has changed at the enterprise?' and in answer you will hear: 'Well, everything is as before...' Hence, the conclusion: Either everything is really as before or this man does not understand the essence of the innovation. Why do we not invite a learned economist to the enterprise and give him the opportunity to conduct comprehensive calculations of 'before' and 'after' work conditions? And afterwards explain the possible temporary losses, the subsequent gains, and all the peculiarities of the new management system to the workers... Without economic knowledge, the workers will continue to remain day laborers of the administrative command system."

Continuing this very thought, certain of our readers emphasize that economic illiteracy of the workers promotes the manifestation of selfish group interests to a significant degree. Not feeling interrelated to the economic processes on a total national economic scale, people sometimes pursue goals which somehow or other inflict damage to society, the state, and in the end, to themselves. You do not need to go far for examples. Let us say, setting unjustifiably high optimal prices which is not so hard to do in a situation where you are a producer with a monopoly. Yes, the collective will get additional

profits, but you either bring your clients to ruin or force them to increase their prices, too. And this objectively works against the financial recovery program.

And now let us turn to Moscow resident K. Totev's letter. "We learn from the press, "it says here, about instances of scandalous legal illiteracy of certain economic leaders. They are not even acquainted with elementary issues of law and render decrees which directly contradict existing law which must not be tolerated in a legal state. It is easy to understand that, without a solid base of appropriate knowledge and skilled assistance, it is extremely difficult to sort things out in the whole stream of current laws. Nevertheless the sorry state in the judicial service at enterprises and providing the national economy with lawyers continues to grow."

This is all correct. Of course, producers need not only economic knowledge, but legal knowledge just like they need air. And not only leaders, but workers, too. How can you live and work in a legal state if you do not know your rights and obligations?

Incidentally, I would especially like to emphasize that last word. Somehow, we all the more frequently run into a situation where people, persistently claiming their rights, simultaneously forget their obligations.

Our newspaper (No 7) already described which measures the government intended to take for sharply increasing the output of goods. In particular, next year they have proposed producing 440 billion rubles worth of goods. And first of all production of durable goods will increase since the demand for them is quite high. Thus, output of videotape recorders will increase by 110,000 units, sewing machines by 300,000 units, and tape recorders by 650,000 units. This is one of the main paths to the nation's financial recovery.

Readers are sending in their suggestions which are capable, in their opinion, of fortifying this program. And we are primarily talking about effectively using the population's surplus monetary assets in a purposeful manner.

Goods and Money

"In connection with retooling the Yelabuga Tractor Plant for manufacturing OKA minicars," writes V. Andreyev, a worker at the Izhmash Production Association, "I propose opening an account at a bank so that the population can accumulate the assets for construction of this enterprise. Do we not use credit when purchasing expensive goods—why should it not work the other way around? The enterprise would settle accounts with its investors not with money but with automobiles after they begin coming off the production line. And the assets allocated for the plant's construction in the state budget could be transferred to other goals..."

I think this type of suggestion does not contradict world practice. If many types of goods are acquired on credit in capitalist countries, then citizens in turn, are liberally financing enterprises through purchases of stocks and securities. Obviously, the issue of stocks, bonds, and securities, also including those for special purposes, must also get appropriate development in our country.

Incidentally, A. Korovin from Primorskiy Kray suggests holding internal state lotteries where high quality durable goods would serve as prizes: cars, televisions, and videotape recorders. Of course, these ideas are not born of the good life but from our common shortages. However, it seems that we have already learned to look cruel truth in the face...

Thinking of ways to flood the market with goods, certain readers are once again inclined toward the idea of even more rigid regulation of the activities of enterprises. "I think that goods are not being provided to market," writes T. Islyayeva, Gorpromkombinat [municipal manufacturing works] legal consultant from Atkarsk in Saratov Oblast. "This is occurring and being supported because the bottom line is ruling everywhere. It seems to to me that all indicators (deliveries, productivity of labor, and commodity turnover) must be natural since demand is determined first of all by units of commodities." V. Malov from Kuybyshev recommends establishing a group A for each enterprise - a stringent standard for output of goods per ruble of wages. And if this standard is not ensured, punish the collective with stringent financial sanctions.

In connection with these letters, we would like to remind our readers: Which standards and indicators have we not used in past years! But did they really help us to improve things? We would like to once again repeat: There is one basic path for resolving our economic and social problems: Increase the effectiveness of production on the basis of deepening cost accounting and improving economic relations.

This is exactly what M. Abdulkarimov's letter is about. He is a teacher at the political academy at Semipalatinsk. Analyzing in particular the leasing terms which are being conceived right now, he writes: "Leaseholders are being reduced (in the press) mainly to private individuals, families, and small groups of people. And really they can also be large collectives (hundreds and thousands of workers). It is only important that they they be owners of the means of production and the land. And then their relation to the means of production will be radically different than they are now. They will become interested, first of all, in their effective use, secondly in their constant improvement and renewal, that is, in qualitative reproduction, and thirdly, in the improvement of the quality of the product produced for there is no guarantee of its sale if it is of poor quality. This is the basis for eliminating both shortages and inflation.'

The second model is cost accounting. Leasing terms. Cooperatives. Now a choice of these forms of labor organization has appeared for people in all spheres of the national economy which better meets the specific nature of their work and ensures the highest end result. And this certainly is most important at the current stage of economic reform. The main thing is that it allows us to reinforce positive progress.

I am ending the review and I already have a thick packet of your letters on my desk, dear readers. Until we meet again on the pages of our newspaper.

Sources of Surplus Money Examined

18200269 Moscow PRAVITELSTVENNYY VESTNIK in Russian No 5, Mar 89 pp 8-9

[Article by Yu. Rytov: "Is the Ruble Always Earned?"]

[Text] Millionaires Within the Law

Not so long ago a sensational piece of news traveled through the land: we now have our own millionaires fully within the law.

One cooperator in the capital paid his party dues out of his earnings in January...3 million rubles. How is it possible to earn amounts of money which are fantastic by our standards?

The secret is extremely simple. The cooperators purchase production waste from state enterprises—items hard to get rid of, and so on, they regenerate them, and they sell them in the West. They have been buying up-to-date equipment, computers in particular, for the foreign exchange they have earned. And they sell them to our government institutions and scientific organizations—for Soviet rubles. It is the difference in price that furnishes the millions....

It is said not without reason: every work of genius is quite simple. And, of course, you cannot deny the cooperators their inventiveness and enterprise. (Incidentally, the members of the cooperative are in fact mainly scientists and specialists who have their own inventions and who have set themselves the task of applying them in practice.) And the pay for good ideas, as is well-known, is expected to be good. What is more, the regeneration of the waste probably required quite a bit of inventiveness and engineering skill. The most important thing is that several exceedingly instructive conclusions can be drawn from this story.

First Conclusion. While we long for a socialist market, for some reason we frequently forget that another market—the world market—already exists and has been in operation for a long time. Concentrating as we do on the traditional exporting of raw materials, we do not know much about its laws, its demand, its supply. It turns out that we do have things to trade!

Second Conclusion, immediately related to the first. We have worn out the word "untapped potential" to the point that we now try not even to utter it. Meanwhile, we possess truly immense potential. Production waste is only one example. Mountains of paper, for instance, have been written about the utilization of slag. Yet slag piles still "decorate" the country's landscape. While we have boundless reserves of sand and clay, we still have not been able to organize production of enough brick. Not for export—just to supply ourselves!

Third Conclusion. The cooperators have discovered quite a few vulnerable spots in the economic system that is now in effect. With unusual ease, to be specific, they tracked down a channel for converting noncash money into cash. And this means that "extra" rubles can again enter the circulation of money, aggravating the shortage of commodities and intensifying inflationary processes....

It is no accident that I am speaking in this much detail about the phenomenon of earnings in the millions. The point is that the desire to realize additional income that flagrantly exceeds the real results of labor and its productivity has also given clear evidence of itself in the state sector of the economy. Of course, here the order of magnitude is quite different—they are considerably more modest, but that kind of income does exist. And, however paradoxical it might seem, the regime of cost accounting (khozraschet) and self-financing is not only not closing the loopholes to the realization of rubles that have not been earned, but, on the contrary, it often makes them altogether legal.

Petty Thefts or the Logic of Cost Accounting?

Last December, the USSR Ministry of Finance conducted a survey of the activity of 14 scientific organizations in the capital. Although they differed in their subordination, they were all operating under the conditions of full cost accounting and self-financing. What did the survey show?

First of all, ministries and departments established an extremely "forgiving" financial regime for their wards. For instance, the standard rates for the charge on fixed productive capital were 1-2 percent of its value. Without exception, all the institutes surveyed had the minimum (rate)—1 percent. Yet there was one exception: the All-Union Scientific Research Institute for Study of the Demand of the Public for Consumer Goods and Market Conditions (VNIIKS) of USSR Mintorg...was altogether exempted from that payment.

The standard rates of transfers from calculated profit into the state budget ranged from 2 to 10 percent. The reader can easily guess that here again the minimum level was adopted as a rule. In 11 of the 14 institutes, transfers from profit into the budget amounted to 2 percent. Only in two institutes of Minsvyaz were they

somewhat higher, although still far from the "ceiling": 6.27 and 6.78 percent. On the other hand, Mingazprom exempted VNIIgaz from this payment until 1990.

What has been the result? The revenues of the budget amounted to only 88.44 million rubles—28 percent of the total amount of profit realized by the scientific organizations. The budget was short 1.522 million rubles solely because of the "soft" rates. Of course, the lion's share of this amount went into the material incentive fund of the collectives....

The survey also revealed other curious points. The level of profitability of research rose sharply (wherever the level was not limited by the ministries). For instance, in the All-Union Scientific Research Institute of the Knitwear Industry 204 projects (85 percent) were performed at a profitability exceeding 30 percent. That number included 19 projects (18 percent) where profitability exceeded 100 percent. In VNIIstroydormash, the respective figures were 112 projects (88 percent) and 7 projects (6 percent).

What makes it possible to achieve that kind of profitability? Again, the answer is quite simple. When cost accounting and self-support were introduced, scientific organizations showed a clear aspiration to increase the number of projects they were performing. At the same time, small projects with short fulfillment time were included in the plan. Thus, large profit was provided for in the shortest time. But the relative share of exploratory research dropped off appreciably and amounted to 2.5 percent last year.

The same trend has continued this year. Whereas, for example, the All-Union Scientific Research Institute of the Knitwear Industry conducted 38 percent of its research with a completion date of less than 1 year in 1987, their share in 1988 was 63 percent, and this year it is 74 percent.

And another paradox: in spite of the high level of profitability of projects, the economic efficiency of their application has been dropping in a number of institutes. For instance, the All-Union Scientific Research Institute of Railroad Car Building of USSR Mintyazhmash realized a return of 4.32 rubles per ruble of costs in 1986, 3.99 rubles in 1987, and 1.3 rubles in 1988. Thus, it dropped to less than one-third over those years. In the All-Union Scientific Research Institute of the Knitwear Industry, which the reader already knows, there are laboratories for the technology and organization of cutting and sewing where the return per ruble of costs is 1.02 rubles. Two kopecks for every ruble invested!

At the same time, wages and bonuses are quite favorable everywhere. At VNIIgenetika, for example, transfers to the material incentive fund in 1987 amounted to 147,000 rubles. In just 9 months of last year, that amount increased to 326,000 rubles, that is, 2.2-fold....

Bonuses are still being distributed on the principle of "a ring for every sister"—on a leveling basis.

But what about wages? In 1988, they rose in the organizations surveyed from 214.98 rubles to 259.33 rubles per month, or 20.6 percent. There were recordbreakers here, in particular VNIIKS, which we have already mentioned. Wages in that institute rose 76.5 percent: from 179 to 316 rubles per month. And this year they are expected to rise to 369 rubles (206 percent relative to the 1987 level).

How has it been possible to double wages over this 1.5 or 2 years? The principal source is the higher rate of formation of the wage fund (69 percent). In addition, the institute has been exempted from payments into the budget for assets and labor resources. Finally, there has also been an expansion in the number of projects, 56 percent of which (valued at 1.83 million rubles) represent appropriations from the budget, 17 percent (319,000 rubles) resources of the fund for development of production, science, and technology, and there has been a minimum number of economic contracts (27 percent).

But these cases are all in Moscow and pertain to only the 14 institutes surveyed. Perhaps they are not typical of other scientific and project planning institutions? Alas, they are.

In front of me is a document of the USSR Goskomstat on remuneration of personnel of NII's, project design and project surveying organizations. It shows that the average monthly wage in institutions doing scientific research rose 4.3 percent between 1986 and 1987. And in the first 9 months of last year there was an increase of 8.7 percent over the same period of 1987. In project design organizations, these increases were 4.5 and 12.6 percent, respectively.

They are stubbornly pulling the distribution "blanket" too far to their own side: less for the state budget and more for themselves.

"Petty" financial thefts? Or the departmental approach, expressing group interests? Or the very logic of cost accounting?

On 22 February, the Presidium of the USSR Council of Ministers took up the issue of serious shortcomings in remuneration of staff members of sector, scientific research and design organizations, and higher educational institutions. Let us hope that the senior officials of the ministries and departments are drawing the necessary conclusions from the discussion that took place.

A Closed Circle

One thing can be said with full confidence: the trend toward a growth of income, exceeding both labor productivity and actual results of labor, has now turned up tangibly in all branches of physical production.

Let us look at the results for 1988. Labor productivity in the national economy rose 5.1 percent. Production of consumer goods rose by the same amount. But personal money income rose by 8.5 percent.

This is a relationship that contradicts both common sense and the laws of economics!

If the growth rates of income exceed the growth rates of labor productivity, then we are clearly paying money for work that is not being done. I will illustrate this with a simple example. Suppose that a furniture combine has been manufacturing 100 little stools a month, obtaining wages of 100 rubles for them. A year passes, under those same conditions it makes 105 stools, but remuneration is 108 rubles. Not 105, but 108! Which means that 3 rubles have been received in exchange for nothing....

However, proportions like these (more accurately—disproportions) exist in the industrial sector as a whole and on a far larger scale: the rise of the average wage for every percentage point of the rise of labor productivity was 1.41 percent last year as compared to the previous year [sic].

Now, about goods. If the growth rate of income exceeds the growth rate of goods and services, then we are putting rubles into circulation which have not been backed up with sufficient commodities. Unsatisfied demand is generated. According to official figures, it now amounts to 70 billion rubles. But according to estimates of certain specialists, it is far greater—as much as 150 billion!

The "extra" money puts pressure on the consumer market, aggravates shortages, and inevitably brings about a rise of retail prices.

These processes are vividly illustrated, to be specific, by the situation on kolkhoz markets. In 1988, their prices were 8 percent higher than in 1985. Including increases of 7 percent for meat and 25 percent for potatoes and fruit. Now, they are 2.7-fold higher than state retail prices!

Unable to obtain the goods and services they need in the state sector and at state unit prices, even the ordinary Soviet consumer is forced to go to the cooperators and to the kolkhoz market. And to overpay, twice as much or three times as much. Thus, an increase in money income becomes an objective necessity. The circle is closed: income increases and is not backed up with goods, unsatisfied demand increases, the price level rises, income increases.... Inflationary processes are becoming stable in nature.

"Extra" Money

Now, let us try to figure out—this time on the scale of the entire economy—how the "extra" money which has not been backed up with goods and rubles exceeding the growth of labor productivity get into the money circulation.

In the production sectors of the economy, the average monthly wage of workers and employees increased substantially when the transition was made to new wage rates and salaries. About 30 million persons are working under the new conditions (out of the 70 million subject to the conversion). And last year the wage fund for them rose approximately 2.5 billion rubles. Yes, this money has been earned. But alas, it has not been backed up with the equivalent quantity of goods and services. Why did it happen that way?

There is an extremely important circumstance we need to take into account here. Presumably, the people displaced from the production branches were not by any means left without anything to live on. They either passed over to other sectors of the economy, or they joined the ranks of the retired.

The statistical service gives these figures. Whereas in the production branches of the state sector the number of workers decreased by more than 1 million in 1988, in the nonproduction branches it increased 300,000. There has also been a sharp increase in the number of persons employed in cooperatives and self-employed persons. They now number almost 2 million....

A second very large source of the buildup of the wage fund is the supplemental stimulation of above-plan output of products in key sectors. Their proportion is between 1.5- and 3-fold in the fuel and energy complex. Is there any reason to be surprised, then, that in USSR Minnefteprom there is a 25-fold growth of wages for every percentage point of growth of labor productivity? It is all legal, it is all within the limits of the established rules. But such rules cannot, of course, make the destiny of the circulation of money any easier; for it, they are "extra."...

And how much is state acceptance costing? And still we now have to pay for quality as well....

The third large source for the growth of the wage fund is its centralized replenishment from the state budget. Some 2 billion rubles are going to raise the wages of personnel in health care and social security and for regional coefficients in a number of northern and eastern regions.

As we see, it is a rather complicated matter to separate the ruble that has been earned from the one that was given free of charge. And probably there is only one sphere of activity where the "extra" money can be detected with the unaided eye. This is all types of unfinished work where we get only intermediate results, but there is no end product. A graphic example: about 1 million rubles in wages were paid in 1988 solely on the basis of the increase in above-allowance unfinished construction.

And enterprises operating at a loss? Here, of course, there is an end product, but...it is not paying its way. Which means that at least 2 billion rubles go for wages out of those 11 billion additional rubles which the state annually pays to those collectives. Here are those unearned rubles, as they say, in pure form.

In all, it is worth remembering, unproductive expenditures and losses in the national economy as a whole amount to 24 billion rubles a year. If we take into account that wages represent approximately one-fourth to one-fifth of the value of output, then with a certain element of error we can determine how much "extra" money we are putting into circulation. Money with nothing standing behind it, in round figures: 5 billion rubles. And it is easy to understand that until we free ourselves of such expenditures, it will not be possible to stabilize the circulation of money....

However, we will not forget that there is also another major channel whereby cash enters circulation. These are payments of all kinds from material incentive funds.

Last year, the material incentive funds of collectives grew by approximately 2 billion rubles. That would seem to be a natural result of the new economic methods. But...only half of that amount was obtained through transfers from planned profit. The other billion came from above-plan profit relative to the indicators of the 5-year plan. In this case, another rate, one extremely advantageous for collectives, is in effect: 70 percent of the amount is left to the enterprise, and only 30 percent goes into the budget.

What is more, an easy way of extracting additional income has also come into being. And this is raising prices on products produced with no noticeable improvement of their performance characteristics.

All of us ordinary customers are especially familiar with the consequences of this phenomenon. Goods at negotiated prices, goods with the code designations "N" ("enka") and "OM" ("emka") have displaced simple and inexpensive articles. So-called goods of improved quality accounted for the entire growth of products of light industry in physical terms last year! Enkas and emkas furnished almost 500 million rubles to material incentive funds of enterprises....

Some indicators used for supplemental incentives altogether duplicated one another. Transfers from profit to collectives for improvement of deliveries under contract, for example, came close to 1 billion rubles. But at the

same time, another incentive was in effect: for fulfillment of the state order. But is it not obvious that this is for all practical purposes one and the same thing?

The general result is that material incentive funds of enterprises exceeded by 10 billion rubles the size envisaged by the 5-year plan....

Administrative Measures or Economic Levers?

In the session of the Politburo of the CPSU Central Committee held 16 February, which took up the set of issues related to financial recovery of the economy and strengthening the circulation of money in the country, a task directly related to the topic of our discussion was clearly stated: "...achieving closer linkage of remuneration with the end results of enterprise performance."

The government has outlined a number of extremely important measures in order to perform that task. Specifically, it envisaged institution of bank monitoring of observance of the economically sound relation between the rise of labor productivity and remuneration of labor. That monitoring will be done every quarter, and it obviously will be rather strict: collectives which are offenders may be left altogether without wages. Equally strict penalties await enterprises which raise prices of their products unjustifiably. Incentive supplements have been abolished on all code designations in light industry except the code designation "N," but even here they may not exceed 15 percent from now on. The system of supplemental incentives for 100-percent fulfillment of contractual obligations has also been abolished.

The reader may put a quite reasonable question: But won't such measures make the further development of the economic reform more difficult—after all, they are all predominantly administrative in nature?

Yes, the measures are administrative. The measures were undoubtedly imposed by the circumstances, and they are temporary. But they are aimed precisely at ridding the new economic mechanism of the vulnerable links that have been discovered in it and at shifting it to a more optimum mode of operation that guarantees protection of the interests of the entire state.

Moreover, the restrictive measures are only one side of the coin. The other side is represented by the most resolute steps to increase the production of goods and services in every way. However, if the growth of money income should continue to exceed the growth of goods and services, we will not reap any benefit: the "extra" ruble will never allow balance between supply and demand.

I foresee yet another reader's question: But can't the problem of the relationship between money income and labor productivity and between money income and the mass of commodities be resolved by purely economic methods?

In principle, that is possible. Most economic scientists see the way out in a system of progressive taxation: either on enterprise income or on the personal income of individuals, or on both—assuming simultaneous abolishment of all other payments into the budget. The whole trouble, however, is that such a system is still in the stage of development....

The measures adopted are aimed—and this needs particular emphasis—not merely at restricting income, at taking us back to the realm of leveling. Their purpose is different—to see that the ruble is earned and is worth its weight. To bring it into conformity with the real results of labor and thereby stabilize the circulation of money in the country.

INVESTMENT, PRICES, BUDGET, FINANCE

Banks Urged to Control Money Supply 18200360 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 16 May 89 p 2

[Interview by Ye. Leonteva with S. Assekritov, deputy chief of the national economic management improvement section of the USSR Council of Ministers: "Whom Does the Socialist Bank Serve?"]

[Text] Really, whom [does it serve]? Our correspondent discussed this theme with S. Assekritov, deputy chief of the national economic management improvement section of the USSR Council of Ministers.

[Leonteva] Stanislav Vasilevich, does the Leninist theory about banks as the economic center of national economic management remain timely today?

[Assekritov] Of course, it is still applicable. Our Gosbank [State Bank] is ascribed to the category of central economic agencies which is tasked with carrying out the role which you are talking about. We must manage money and credit relations through the banking system. The bank is one of the most important instruments for regulating the nation's economy and for influencing an increase in the effectiveness of production. We may may extend credit primarily to sectors which have a need for priority development. And we may "suppress," restraining any "non-critical" production. Thus, the bank has enormous influence on the whole course of economic life.

[Leonteva] Well, this is characteristic for only a normally functioning economy. But what about now?

[Assekritov] And now the government is trying to standardize it. They have given the banking system the opportunity to broaden and deepen, it is increasingly drawing nearer to its clientele, and gradually becoming their worthy partner. Banks have been provided complete independence. And it will be too bad if they conduct themselves in a passive manner and concern

themselves only with transactions between enterprises and only finance capital construction. It is true that such a bank, if it does not go bankrupt in the end, will be non-competitive.

We need to admit that banks are still not increasing their range of services and are still not involved in marketing. Progressive forms of accounting are being too slowly introduced into the national economy. In relations among partners, they frequently conduct themselves in an elitist manner toward enterprises and in some circumstances are not equals. Taking the current economic difficulties into account, banks are obligated to take a more active position.

[Leonteva] In the West, banks invest funds in more promising sectors, actively collect funds from the population, and invest them in production. We are still continuing to operate with "empty" money and produce air. According to calculations performed at the Leningrad Financial and Economic Institute, banks are paying out 300 billion rubles in unreal money as if it actually exists. But in any industrially developed country, any bank can pay out only what it has. If not, it is really borrowing from its neighbor but it cannot deceive.

[Assekritov] I do not know how accurate that 300-billion ruble figure is. But you are correct, the existing system for extending credit naturally led to the appearance of unreal money which is not supported by a mass of commodities. This can also be actually called air. Now the situation is changing.

[Leonteva] One of the most important conditions of radical changes is complete and truthful information about the state of affairs in money management. Moreover, data has not been published about putting money into circulation since 1926. The issue must be justified and it must be explained. Can you say how many bank note were issued, let us say, in the first quarter of this year? Is it not time for Gosbank to show its hand?

[Assekritov] We still have not published that data. But it is really time to show our hand.

[Leonteva] Now many economists are proposing subordinating the USSR Gosbank not to the government, but to the USSR Supreme Soviet. Then, they say, it will more responsibly carry out its monopolistic right to issue money.

[Assekritov] I am not an advocate of these proposals. It would be better if it became an independent agency. It is obliged to carry out its functions responsibly even now.

[Leonteva] Will the excess money exchange rate channel go further? Can we end their unjustified issuance?

[Assekritov] We can.

[Leonteva] How quickly? What sort of calculations and proposals are there?

[Assekritov] I think we have already reached that time. A decision has been made to extend credits which are backed up by assets. As for cash, we are now seeing a rapid growth in wages which has become unmanageable in our country. The State has been forced to resort to stringent wage controls so that wage growth will not exceed the relative rate of growth of the productivity of labor. Everything is moving toward ending excess issuance of money. A step in that direction has been made and we need only to strictly monitor observance of the standard correlation.

[Leonteva] You are sure that this correlation will work? Why will life not reject it?

[Assekritov] The ideal variant, of course, is fiscal regulation. But it will not be earlier than the 13th five-year plan. This standard correlation will operate for the remaining year and a half. And banks are obliged to control it.

[Leonteva] But this question is being raised. A worker produced this number of items which he is supposed to according to the norm and he should be paid for this. What kind of business does he have with standards set from above? He demands his pay anyway, it is his blood money.

[Assekritov] The trouble is that cost accounting has not yet reached each work place or each sector. Therefore, the worker's demand to be paid his wages in spite of everything is understandable. He does not know today that he must contribute as much profit into the common money box and he must operate with such expenditures for this. If a worker could conceive his own contribution to production in detail, then he would not be afraid that any sort of dissatisfaction would arise.

[Leonteva] Dissatisfaction is putting it mildly. This is fraught with a serious confrontation between workers and the administration, right up to strikes. As for cost accounting, I do not think that the worker is receiving enough information about his true contribution and he will agree on the spot to get as much as they will give him. As long as he does not manage the production assets and cannot see the results of his labor, until that time he will hardly look submissively at terms established from above both in his demands and in the size of his salary.

[Assekritov] This is what I think: Having made a stake on cost accounting, we underestimated one important moment. Having given enterprises total freedom to determine profits, we relied too much on their political and economic maturity. There are, of course, enterprises, where intelligent leaders themselves understood that one cannot disperse monetary assets on immediate needs. They think about tomorrow and the greater

portion of their profits are directed at increased production and modernization. But the majority of enterprises, having used their freedom, directed their money toward direct and veiled wage increases. A direct squandering of assets is going on in many cases. Workers of individual Moscow scientific and design institutions received, let us say, up to 100 pay increases during the last year.

Today we read cheerful reports in the press that additional payments and pensions are being raised. Each retiree at certain enterprises receives a 5,000-ruble pension. Boys go into the Army, they receive 100 rubles per month and, when they return [home], they each receive 2,500 rubles. It is a sort of noble deed but here we can see so-called hidden income distribution first hand, which operates at increasing real wages. These processes must be regulated through taxes.

[Leonteva] That is, interests have come to light which the reform ideologists had not taken into account in the economic mechanism. But why, Stanislav Vasilevich, does the bank take different positions regarding citizens and enterprises? It does everything to place obstacles before attempts by rank and file members of society to obtain loans but provides them to factories free of charge. In the first place, it is a Hobbesian position and, in the second, it is excessive Liberalism.

[Assekritov] An enterprise is a reliable subject which provides firm guarantees. There are resources to obtain from it if the debt is not repaid. Moreover, banks were also initially established for credit and accounts servicing of enterprises anyway. Previously in our country, savings banks provided services to the population and today it is the Savings Bank.

Yes, the barriers which you are talking about are quite obvious. But, really, a totally unknown man comes in and asks for a loan, essentially, without fixed assets. He has, in the best of cases, brought wage information from his work place. Nothing else. Therefore, the bank takes a risk. There have been cases where people have taken out loans and have disappeared without a trace. The Ostap Benders have still not become extinct.

[Leonteva] But in the developed countries, banks conduct massive transactions with the population, also not without some risk. And we cut off a complete function from them only because there are dishonest people in our country. Why do we lump together criminal acts and the bank's economic tasks?

[Assekritov] Of course, we need to improve relations with our clients. But as for foreign practice, I must tell you: There is a bank branch for each 1,000 people there and bank employees know each of their clients personally. They conduct practically all everyday affairs through the family budget. This still does not exist in our country.

[Leonteva] Obviously, we need to strive toward this. Pushing aside the individual client can hardly promote the adjustment of "family" relations with the bank. Besides, a refusal to conduct such transactions tells us at the same time that the bank is not trying too hard to make money. Concerning enterprises, I am not convinced that the bank always thoroughly knows their financial situation, too. The ease with which credit is still being extended sometimes surprises me. And you are saying that there is no risk...

[Assekritov] Radical changes are now occurring regarding enterprises. Many of them still complain that they cannot get credit. Banks have begun to give money to those that are solvent. But, at the same time, we continue to extend credit to enterprises operating at a loss. The new unified system of banks has not been able to carry out radical changes in bank operations in one year. A resolution was recently adopted to transfer banks to cost accounting since they will be entirely and completely dependent on what they earn.

[Leonteva] But for some reason only the district section of the banking system has been transferred to cost accounting. And the oblast and union sectors, as it turns out, are remaining, to a certain degree, dependents and overseers?

[Assekritov] The oblast section is carrying out planned distribution functions. They practically do not work with clients and live on deductions from the regional section. The local section also operates union banks. But there is nothing criminal in this since they are management agencies.

[Leonteva] You say the banking system is unified. Therefore, commercial banks—there are now quite a few of them—are an equal part of that system. But the administrative system retains the right of final decision—to be or not to be. Now the Minfin [Ministry of Finance] has proposed establishing a 60 percent tax on commercial bank profits for payment into the union budget.

[Assekritov] We are researching the percentages right now. The tax system which will be adopted in the 13th five-year plan, provides for a unified approach to taxing the profits of all banks.

[Leonteva] If you consider that the current banking system is a step forward, I would like to know what initiatives banks have promoted during the restructuring process?

[Assekritov] There were quite a few proposals that displayed initiative. But naturally not all of them are equal. There are even those for which one could be punished. For example, where do we stand regarding payment for exchange of damaged paper money which was introduced by the Moscow Zhilsotsbank [Housing Social Bank]. It is good that is was revoked in a timely manner.

And the Savings Bank, under the guise of cost accounting, began to demand money from enterprises for issuing wages to enterprise employees. There are also sound proposals. We are also talking about corrections in the situation created in money circulation at the same time. There are good developments, which are turning us in fundamentally new ways toward credit plans and toward a balance of monetary profits and expenditures of the population. For example, I support these ideas.

[Leonteva] Has even one of these initiatives been realized?

[Assekritov] The clients' right to choose their bank has been realized for example. This is not a USSR Council of Ministers initiative; the banks themselves arrived at this conclusion. It is important that the main section has displayed initiative.

[Leonteva] I would put the question to you in another way. Are the banks capable of using any initiatives which could have a major impact on altering the economic situation?

[Assekritov] I can name one initiative which is in the developmental stage. This is the compilation of monetary income and expenditure balance sheets at every management level. Unfortunately, today we control the situation only at the end of the year. Promstroybank [Industrial Construction Bank] proposes working out this balance sheet on a quarterly basis and at all levels, that is, at the governmental level, too, and at the level of the union republics, oblasts, districts, etc. They go even further on this issue and say that it is also necessary to compile a balance of money circulation. They will be taking the movement of both cash and non-cash assets into account and this will help us control the inflation process.

[Leonteva] Why could you not copy the banking system which exists in the West? They have been perfecting it for decades. Or are we obliged to invent our own?

[Assekritov] A simple copy would most likely be an error. Different systems, different economic institutions, different forms of influencing the processes in the economy. And there is also a market in capitalist countries which regulates many processes. But the market is only now coming into being in our country. But in principle, we have already borrowed some things.

[Leonteva] As you know, copying something element by element is a most disadvantageous tactic. Would it not probably be more useful to copy not elements but the sense, the internal content?

[Assekritov] I agree. Obviously, we have to establish a stock market in the near future since a securities market is coming into being. We are once again studying this abroad. It is also important for us to study the style and methods of the banking apparatus.

[Leonteva] Is there an on-the-job training program abroad for our bank employees?

[Assekritov] There is, and it is only limited by our hard currency capabilities. It is true that bankers in a number of foreign countries are even prepared to teach our employees at no cost and all-expense paid—just come. They are interested in us and believe in us.

Gosbank Drafts Changes to Banking, Credit Policy

18200308 DENGI I KREDIT in Russian No 3, Mar 89pp 3-13

[Article by I. V. Levchuk, deputy chairman, Board, USSR Gosbank: "Banking Reform in the USSR"]

[Text] With the restructuring of the economic mechanism and recognition of the new economic processes, banking is also being reformed. As the center for the methodological guidance of the activity of the credit system, USSR Gosbank has developed a number of new documents that enhance the depth of banking reform. They contain principles pertaining to short- and longterm credit, interest policy, credit planning, and the organization and execution of noncash transactions. Drafts have been prepared of: the statute on converting banks to economic accountability; standard charters of cooperative and commercial banks; rules governing their organization and registration; requirements and terms for authorizing the issuance of stocks; and rules governing the sale and accounting of their movement. A draft has been prepared of a statute for monitoring the rational expenditure of wage funds.

Serious work is in progress on the Law on Banks in the USSR. Such a law previously did not exist, but events confirm the necessity of adopting it. It must contain basic provisions regulating all aspects of banking in the nation, including the structure of banks, their rights and obligations, the character of the interrelation of funds, the range of operations, etc. These documents conceptualize the new features that exist in banking and that correspond to the modern demands of economic development; they also take foreign experience into account to a certain extent. However it still cannot be said that work on the forms and methods of banking is complete. Banking instruments will be reformed with the introduction of full economic accountability and self-financing, the development of lease relations and the cooperative system, commercial and cooperative banks, and the expanded use of stocks.

The conversion of enterprises and organizations to full economic accountability and the necessity of resolving all questions relating to the granting of credit at the place of opening of the account (current account or account for financing capital investments) of enterprises and organizations, as provided in the Law of the USSR on the State Enterprise (Association) determined the need for new approaches to the organization of the granting of credit. The task is to eliminate automatism in granting credit

and in settling accounts, to avoid interfering in the current activity of enterprises, and to avoid bothering them with superfluous checks. This will require changing the existing practice: refusing to grant credit to many objects, limiting credit granted to each client and object, restriction of its issuance in this stage to the planned level of inventories and costs—with the strengthening of the financial status of the economy—to seasonal and other temporary above-norm needs.

The interrelations between the bank and the enterprise must be based on the economic and financial status of the latter and the prospects for its development. And the potential of the given bankruptcy department is determined by its credit resources. This approach is a part of the rules (being prepared for introduction) governing the issuance of credit to enterprises and organizations.

The reform requires a dramatic rise of the level of knowledge of bank economists and their increased responsibility for granting credit. The most important consideration here must be man, his initiative and responsibility, and not instructions that cannot provide for all contingencies in life. This is not an easy matter. For decades the bank apparatus has become accustomed to working in accordance with hundreds of paragraphs of instructions. Time demands change in economists' thinking. Questions must be resolved on the basis a knowledge of the state of affairs of the enterprise served, the prospects of its development, business conditions and the bank's potential, particularly to attract the needed resources. Of course, it is necessary to have a good knowledge of credit activity. To a bank economist this is the fundamental of fundamentals.

The bank's interrelations with farms must always be based on a contract governing the settlement of accounts and credit [raschetno-kreditnyy dogovor]. Previously the discussion was only about the credit contract. However the reforming of the settlement of accounts under full economic accountability requires that accounts between enterprises and organizations also be contractually regulated.

It is essential to determine the character of an economic organ's accounts that were opened in a given bank institution, the content of operations associated with them, interest on them, and other aspects of the interrelations between the enterprise and the bank in maintaining and settling accounts. With the development of commodity-monetary relations, such a contract will be saturated with ever richer content and will have an ever increasing impact on the effective functioning of the economy. It must incorporate demands for the normalization of material inventories and production costs, the acceleration of the turnover time of working capital and its rational use based on the introduction of progressive resource-saving technology, and other factors in the intensification of production. Provision should also be made for the flexible use of rewards and sanctions.

For example, under the existing statutes, when a loan comes due the appropriate funds are taken from the enterprise's account. If, however, the enterprise does not have sufficient funds in its account, the loan is classified as overdue. The enterprise will then pay higher interest—not 2, 3, or 5 percent but 10 percent—on the overdue loan. This rule is automatic. At the moment that the enterprise is in the most dire need of funds, the bank imposes tighter restrictions on relations with the enterprise. Moreover, this sanction was not preceded by even the minimal analysis of the economic and financial status of economic organs, by a warning, by an analysis of ways of improving matters.

This is hardly correct in all cases. Collectives frequently suffer from nonpayments by other economic organs. But instead of analyzing the chain of nonpayments and supporting the enterprise, the bank invokes sanctions against it. While sanctions are need, they should be introduced consciously, not automatically. These, like other interrelations, should be contemplated in the contract. The contract should promote the normal work of the economy and the planned circulation of resources.

Contractual relations with the economy expand the rights of the bank's lower-level institutions. All questions associated with the granting of credit must now be resolved by bank institutions at the local level. The credit contract must become the only instrument that defines the interrelations between the bank and enterprises. The bank institution together with the institution will be able to independently determine the objects for which credit shall be granted, the procedure by which credit is granted, the procedure of its repayment, other conditions facilitating the enterprise's attainment of high end results in its work, and the rights and obligations of parties in observing the credit contract.

Credit principles remain and should be strictly observed. The effectiveness with which credit is used and the guarantee of its repayment on schedule are advanced to the forefront. It will also be possible to preserve objects, not fractionated objects as at present, but consolidated objects. Then the targeted use of credit will receive new content and will not be connected with the granting of credit for private goals.

Of course a number of basic principles remain the same in the case of contractual relations as well. Credit may not be granted to enterprises that have a nonliquid balance, that use credit to cover financial gaps of long standing, mismanagement, and losses.

Bank credit should not be used to cover constant inventories that are determined as the enterprise's minimum inventory for the preceding year, i. e., credit should not be granted for the part of normed working capital that should be formed on the basis of own working capital. The observance of this principle will make it possible to magnify the impact of credit on lowering inventories in the national economy and will prevent the formation of

superfluous means of payment. This is why the amount of credit will not be determined on the basis of planned inventories and production costs. As noted above, the planned amount of credit must be determined by the bank institution together with the enterprise on the basis of economically substantiated need.

The concept of the planned level of inventory and costs was introduced recently, in 1987. The belief was that the application of this indicator and fines for exceeding it would reduce the level of inventories at enterprises. In addition to this, the new indicator made it possible for enterprises to use credit to cover above-norm inventories. This violated a rule that had proven itself in practice: to disallow the granting of credit for above-norm inventories because credit for them was to range from the norm to the maximum level of inventories and costs. At the same time, in 1987-1988 the level of inventories in the economy did not diminish and above-norm inventories were not drawn into useful economic circulation.

Therefore, when the Board of USSR Gosbank devised new credit rules, it tightened up the procedure for granting credit for enterprise inventories. It would obviously be irrational to cease granting loans for abovenorm inventories all at once: it would hardly be possible for enterprises and organizations to use up their abovenorm inventories in 1 or 2 months. It would be more rational to lower the level of these inventories (especially in view of the fact that this level has not been attained at many enterprises) and to impose stiffer sanctions for exceeding this level. Annual interest on above-norm inventories within the limits of the established level should be 15 percent; for overdue loans—15 percent + 10 percent, i. e., 25 percent. This interest should be paid out of profits left at the enterprises' disposal before they are distributed among the economic incentive funds.

The new credit rules presuppose the introduction of a new type of loan document—the obligation-commission [obyazatelstvo-porucheniye]. This is the result of the circumstance that raises the role of the current account: the use of funds from it must as a rule be by order of the enterprise that owns the account. It is therefore inappropriate to have only an obligation to repay the credit in a specified period of time. It is more correct to be guided by an order of an economic organ.

Nor are regular checks on the security for credit planned. The security of well functioning enterprises may be checked only on the basis of quarterly balances. However, when necessary the bank may also institute another procedure (may check security on the basis of monthly accounting data) which, like other types of checks, must be specified in the contract.

It is planned to strengthen the ties between credit and monetary circulation. In particular, payroll loans will not be granted to enterprises and organizations that have allowed the average wage to grow at a faster rate than labor productivity; sovkhozes and kolkhozes will not obtain payroll loans directly from a loan account but, like all other enterprises and organizations, will obtain these loans from the current account in calendar sequence.

It is planned to base credit to enterprises and organizations in all branches of the national economy, including agriculture enterprises and trade and supply organizations. on these rules. If necessary, specialized USSR banks, with the consent of USSR Gosbank, may make provision for granting credit to individual branches of the national economy.

USSR laws "On the State Enterprise (Association)," "On Cooperatives in the USSR," "On Individual Labor Activity" and the implementation of other measures to reform the management of the national economy necessitated radical change of long-term credit.

The existing system for crediting capital investments, which formed in the sixties and seventies, is to a considerable degree peremptory and reflects the attempt to depict all types of long-term loans in instruction form. It thereby hinders economic initiative and reduces the responsibility of bank institutions for the effective use of the loan fund for capital expenditures.

Practice demands making the transition from the regulation of credit for individual types of capital investments and specific credit use periods to the organization of credit relations based on the economic and social effectiveness of the expenditures for which credit is granted and the management of these processes through economic levers and norms. General new approaches are determined by the following basic principles.

As with short-term credit, interrelations between enterprises and the bank in the case of long-term loans will presumably be based on a contract. Contracts define the rights and obligations of the parties and are concluded for the full term of the bank credit.

There are practically no restrictions on subjects of credit [subyekty kredita]. They may be state and cooperative enterprises, mixed organizations and associations using foreign capital, lessees of land and means of production, persons engaged in individual labor activity, and individual citizens. The effective use of credit and its repayment on schedule are an indispensable condition to the conclusion of a contract.

The general approach to the objects of credit [obyekty kredita] is determined by the repayment period which is based on existing norms for enterprises and organizations. Banks may grant credit for the goals of production and social development for the normative (planned) period of expenditure and recovery, not to exceed average branch norms.

It is also planned to grant loans for measures (with an early payoff) relating to the technical reform of production and the expansion of consumer goods production. The terms under which they are granted and repaid are connected with the level of recovery of the expenditures for which the credit is granted. Credit will be used to defray the full cycle of costs all the way from scientific development to the series production of a new product.

In accordance with the decisions of the June (1988) Plenum of the CPSU Central Committee, it is planned to make the transition to the broader application of credit for capital investments in place of budget financing. The bank proceeds from experience accumulated in the given area and the recommendations of economic scholars on the advantages of long-term crediting of capital investments compared with nonreturnable financing. The amount of credit for the indicated measures is determined on the basis of the initially approved estimated cost in the full sum. It is an absolute condition that the borrower's own funds participate in the implementation of a given measure. The share of the enterprise's own funds is specified in the credit contract. It is also advisable that the banks participate with their own resources in the creation and activity of Soviet enterprises and joint enterprises with foreign firms. Such experience is being amassed.

The bank may monitor objects financed by enterprises' (associations') own funds or by budget allocations only at their request, on a contractual basis, and for a fee. It must be stipulated that if the bank concludes such a contract, it in so doing assumes the obligation to ensure uninterrupted financing. This will raise the bank's responsibility for making realistic appraisals of sources of financing of capital investments during the entire period of construction, for the quality of the documentation, and for ensuring that the contractor has the necessary capacities.

It appears feasible to grant loans for the construction of housing and sociocultural facilities not only to state enterprises (associations) and organizations but also to kolkhozes and interfarm enterprises and organizations in agriculture.

The adoption of general statutes on the organization long-term credit for the national economy and the population will make it possible to eliminate repetitions and explanations of general questions in the instructions. In the process, more than 10 bank instructions and guidelines will be eliminated. The central apparatus of banks will have more opportunity to carry out economic work, especially in the interest of resolving practical questions in the effective mobilization and utilization of the loan fund and in rendering specific assistance to bank institutions in this regard.

The intensification of economic reform, the development of commodity-monetary relations, and the development of the economic independence of enterprises

demand improvements in the procedure for settling accounts. The detailed regulation of the settlement of accounts "for all contingencies," provided for in bank instructions, comes into conflict with the new forms of management, with the higher role of contractual relations, and with the possibility of enterprises and banks choosing ways of settling accounts that are most appropriate to each specific case. It has therefore been necessary to reexamine or supplement existing forms for settling accounts. The application of one or another form, the use of various monetary accounting documents, the time schedule of their delivery and processing in banks, credit relations connected with payments—all this is covered in the contract on credit in the settlement of accounts. The contract is an indispensable condition to the effective application of the forms that are being introduced for the settlement of accounts.

Accounts are to be settled with the supplier's money demands (payment demands and commission demands), with payment commissions, using documentary letters of credit and clearinghouse checks. The settlement of accounts with the aid of payment demands will for the most part retain its content even though there will be a number of differences in their execution. The settlement of accounts will primarily be based on negative preliminary acceptance, which takes 3 working days.

It can be said that the conversion to preliminary acceptance will delay the settlement of accounts. However, in fact it will bring the time the goods are in transit into line with the time it takes to transfer payments. The fact of the matter is that the time goods are in transit is longer than the time it takes to pay the bill and to transfer the payment to the supplier's account. Therefore the introduction of the settlement of accounts by payment demands with preliminary acceptance in all cases will only make it possible for the customer to verify its correspondence to the terms of the contract on the basis of bills and in a number of cases on the basis of the good itself. This will reduce refusals to accept in the national economy and they, as we know, amount to many billions of rubles.

The settlement of accounts with commission demands has its own specific features. The monetary document, as its name suggests, combines two documents: the supplier's demand for payment for a good and the buyer's commission to the bank to make this payment. It is established that the supplier bypasses his own bank and sends the documents directly to the buyer. The latter, after verifying their correspondence to the contract, sends them to his bank to be used as an order to deduct funds and transfer payment to the supplier's bank. The payer has the right to alter the sum of payment depending on the supplier's fulfillment of his contractual obligations. This excludes the subsequent possibility of the acceptance-less writeoff of part of the value of a good (for which a refusal to pay was previously declared) and the imposition of fines for the violation of delivery terms.

Such a procedure will strengthen contract discipline in fact, will make it possible to introduce the acceptance of goods more widely and will relieve the bank institutions of the supplier and the payer of the necessity of formally monitoring the correctness of the documents and the paperwork. The settlement of accounts by payment commissions will essentially remain unchanged. It is only assumed that they can be used to pay for all goods and services and that in the absence of funds in the payer's account, payment will be made in the established sequential order.

It is assumed that limited and unlimited checks will be replaced by standard clearinghouse checks that can be used to pay for all types of goods and services. The sum of a check may be deposited from own funds or bank credit or may be guaranteed payment by the bank.

In addition to the present settlement of accounts with the aid of letters of credit, accounts will be settled on the basis of documentary letters of credit, payments from which are guaranteed by the bank of the issuer of the letter of credit. Such a letter of credit will be issued to the most reliable clients in accordance with the contract without the deposit of funds by the issuer of the latter of credit.

Of course, the bank will charge for all guarantees issued by it because the bank obligates itself to pay the money from credit resources. The procedure for guaranteeing payment will be formulated with due regard to the interest of the economy and the banks.

The reform of the economic mechanism and the development of value levers require the rethinking of interest policy. It is known that interest on credit has no objective basis. The average level of interest is a purely market magnitude and depends on the money supply and demand, on the degree of development of the money market, on sources of available money (from the standpoint of the period of its availability), the borrowers (their credit rating, credit history, and interest), and other factors. The sum of these factors determines the level of the interest rate under the given conditions.

Unfortunately, for a long time there was much that was subjective in the formation of our interest rate. In its attempt to help certain branches of the economy, to create individual priority directions in the use of credit, the bank frequently did not take into account its commercial nature and commodity essence. The low interest rate devalued credit, which created in the economy the notion that credit was a widely accessible, inexhaustible resource. If we compare the average interest rate for credit with payment for other types of resources, we will find that the most flexible, liquid type of resource—the bank loan—is cheaper than payments for fixed and working capital, for water, for labor and other resources.

It was believed for many years that if a branch of the economy managed to induce the bank to lower interest rates, its leadership had done a good deed for the national economy. We know the result in agriculture: loans were not repaid to the bank but were used to pay unearned income, which undermined the incentive of blue-collar and kolkhozes workers to work conscientiously and efficiently.

Subjective flaws were permitted in interest policy in many branches of the economy and in many types of credit. Thus, credit for current commodity turnover is granted to consumer cooperatives for 2 percent annual interest while shareholders were paid 3.4 kopecs per ruble of investments last year (3.4 percent annual interest). Cooperatives therefore find it more advantageous to use credit than to sell shares. This is obviously one of the main reasons why bank credit comprises eighty-ninety percent of the consumer cooperatives' working capital depending on whether they are engaged in wholesale or retail trade.

Overdue loans to agriculture (approximately 70 billion rubles) do not cost it a kopecK because no interest is charged on these loans. The bank charges individuals borrowing money to purchase and outfit garden sheds 0.5 percent annual interest; the same money in a time deposit account in the bank will bring the depositor 3 percent annual income.

Practice confirms the fact that subjective approaches, the desire to confer special status on a branch, and to create favorable conditions for it in the form of meager interest rates are not producing the desired results. At the same time, socialism cannot tolerate spontaneous trade in money or spontaneously forming interest rates. There are a number of starting-points that cannot be ignored in the implementation of interest policy.

Most important among them is the minimum interest rate level upon which the entire system of interest rates must essentially be based. Under the conditions of commercial, not peremptory activity of banks, this level must cover the cost of borrowed resources and expenditures on the maintenance and development of the banking system and its social components. Banks pay different rates for resources borrowed from the population and the economy. The range is from 0.5 percent to 4 percent depending on the borrower and the term of deposit. However, the average level of interest for these resources is approximately 3 percent. In order to pay this interest and maintain the credit system, the payment for credit must exceed this minimum level, i.e., must be more than 3 percent

The opinion has become firmly established that interest should take into account the level of a branch's profitability. But this opinion ignores the demand that all farms in the country raise their level of profitability and emanates from the necessity of granting special treatment to weak farms and in some cases of even covering up mistakes in financial planning or excessively high demands by the budget on enterprise profits.

When commodity-monetary relations are functioning normally, the criterion of branch profitability in determining interest rates is unacceptable. A commercial bank cannot exist if the level of interest rates is lower than the cost of the borrowed funds. If it is necessary to help some branch, this assistance must come directly from the budget or from appropriate financial funds but must not be at the expense of a commercial bank's income.

It would be proper to have a uniform average interest rate that would be the basis for extending credit to farms. Its level should also take into account payments for other types of resources. This rate obviously cannot be lower than the rate for other resources, e. g., the rate for fixed and working capital.

Under existing conditions, when a farm is not yet ready for the new interest rates to be introduced, transitional interest rates may be instituted for all types of loans regardless of branch.

The basic minimum interest rate for short-term loans should be 3 percent. Payment for overdue loans should be instituted even now because of the diversion of vast resources primarily in agriculture. At least 1 percent annual interest should be charged for these loans for a certain period of time until agriculture's level of profitability rises. Considerable resources are diverted to defray the price differential that must be compensated from the budget but that does not diminish for years. The budget should be charged 3 percent annual interest for these resources. As regards enterprises that are making payments for capital to the budget, the interest rate on credit extended to them should be higher than the level of those payments. The most mobile and liquid monetary resources must cost more than other types of resources. International experience indicates the existence of a direct dependence between the term of a loan and the level of the interest rate. The longer the term of the loan, the higher the interest rate, and vice-versa. This is economically justified.

This rule has not been applied in our practice. Thus, long-term credit has been and continues to be cheaper than short-term credit. This has been due to two circumstances. First, because long-term credit was for many years used primarily by kolkhozes and sovkhozes having a low profitability level. Second, because of the absence of a money market in which interest rates form. And even now the ratio of the term of credit to the interest rate is not properly regulated. In the future, a higher interest rate should be charged for funds that are diverted for a long period of time.

USSR Gosbank should establish a basic interest rate on loans that includes standard construction time and the standard capital investment recovery time. If the planned term of credit adopted by the bank in agreement with the enterprises is longer or shorter than this standard time, the interest rate will be raised or lowered compared with the basic rate for each year of deviation. Naturally the basic interest rate must also take into account the level of payment for funds borrowed by the farm and other types of resources on the farm.

The restructuring of the economic mechanism, including banking, also raises other problems. One of them is the problem of settling accounts between farms and banks with the advent of specialized state banks and the development of commercial and cooperative banks.

As is known, it is now stipulated that specialized banks shall settle accounts in branches of the national economy while USSR Gosbank shall be responsible for the settlement of account between banks. This correct principle, which has been tested in world practice, has not yet been realized to date. The problem it that does not have clearing-house centers that could handle banks' correspondence accounts.

Many economists believe that USSR Gosbank can perform this function with the aid of so-called interbranch turnover (MFO—mezhfilialnyye oboroty). But the MFO system is not a system that settles accounts. It is a system that monitors the movement of funds within a single bank. It was effective when it encompassed one bank that was entirely responsible for the correctness of internal transactions. MFO cannot ensure the unity of the settlement of accounts with the reorganization of the banking system and the operation of several specialized banks. Each bank is independent and must conduct its transactions independently.

USSR Gosbank must secure the settlement of accounts between banks having clearing-house centers by reflecting the operations of specialized and other banks on the basis of correspondence accounts. This will not be the only result of the improved system for settling accounts. Each bank will have precise knowledge of borrowed resources in the accounts it is settling and will be able to plan operations involving assets correctly.

Nor is another variant that envisages the settlement of accounts by a single system of computer centers excluded. But this requires making the system of centers a shareholding system. It would belong to all banks in the nation which would make it possible to exclude departmentalism from the settlement of accounts. This system would also have to be vested with the rights and obligations of a national clearinghouse.

The decisions concerning banks presuppose that they must function as cost accounting organizations. The plan is to convert the departments of four specialized banks to cost accounting operation as the basic link. A new

situation has developed. If the departments become cost accounting departments, the higher organizations must not interfere in their everyday activity and will have the obligation to create all conditions for equal partnership between banks and the cost accounting enterprises and organizations they serve.

At the present time, each department of a specialized bank, if it is the only one in a rayon (city), and this is true of the great majority, serves a clientele of all specialized bank in a given region. It consequently has 3-4 credit plans with different banks. Under these conditions, it is hardly possible to determine the share of a given bank's operational incomes and expenditures. The only solution is to allow each department to dispose of all resources entirely at its own discretion; to rescind departmental credit plans; to compile one credit plan or to allow a department to operate on the basis of resources it has mobilized locally or borrowed from other banks. This will make each bank department a full-fledged partner of enterprises and associations.

It is obvious that other problems will also arise in connection with the conversion to cost accounting. Some of them are evident even now. Chief among them is the resource problem. A procedure should be developed by which departments of specialized banks acquire resources from their higher organizations and from other banks.

The state of the circulation of money is a source of great concern. The circulation of money needs to be normalized. Unless this problem is resolved, it will hardly be possible to strengthen finances and to develop wholesale trade. This problem is connected to a considerable degree with the proper organization of the granting of credit since the granting of credit creates new means of payment. In order to solve this problem, it is first of all necessary to determine a farm's real resources and the actual size of the loan fund. There are theoretical approaches to the solution of this problem. The methodology and methods of calculation actual resources remain to be developed with the aid of science. On this basis it is necessary to bring credit investments into line with the real loan fund. This is a difficult task. It will be necessary to plan the normalization of credit investments for a number of years and to extract superfluous means of payment from the farm's circulation. These resources are invested in the enterprises' constant expenditures, in loans to replenish the norm, in the enhancement of norms (the compensation of declining income in the sugar industry, etc.); in credit extended to the budget to defray the difference in prices on agricultural products; and in all overdue loans. It is also necessary to include surplus inventory of materials assets and equipment in economic circulation; to alter the correlation of sources of economic organs' working capital while significantly increasing the share of own working capital.

These and other measures will make it possible to bring credit investments into line with the normal requirements of production and circulation; to dramatically reduce the number of payment means in circulation, which will also be a real contribution to the normalization of a farm's finances.

The time has also come to use economic methods to regulate the circulation of money. As we know, for a long time the circulation of money was clearly divided into two spheres: cash and noncash. The transformation of noncash means of payment into cash means was strictly regulated. Rigid partitioning between the two spheres of the circulation of money practically excluded the uncontrolled influence of noncash on cash turnover. Therefore all attention of Gosbank, like other economic organs, was concentrated on monitoring the circulation of cash. Appropriate methods for managing them—methods for satisfying the requirements of the time—were developed.

The transition to economic methods of management, the development of full cost accounting and self-financing, various types of cooperatives, the lease contract, and other new economic forms of management have largely broken down the rigid partitions between the different spheres of circulation of money. Noncash means of payment are more and more easily becoming cash means of payment. There is now a need for methods of managing not only cash but all monetary circulation that can be chiefly regulated through the credit mechanism.

Radical economic reform and the development of banking will also pose other problems to theory and practice. The efforts of the bank's scientific and practical workers must be directed toward the timely identification of these problems and the development of effective methods for resolving them.

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REGIONAL DEVELOPMENT

Justice Minister on Legal Issues of Regional Economic Autonomy

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[Interview with USSR Minister of Justice Boris Vasilyevich Kravtsov by A. Gnidenko: "An Order for a Law"]

[Text] USSR Minister of Justice Boris Vasilyevich Kravtsov responds to EKONOMICHESKAYA GAZE-TA's questions concerning the draft General Principles for Restructuring Management of the Economy and the Social Area in Union Republics Based on Expansion of Their Sovereign Rights, Self-Government and Self-Financing.

[Gnidenko] One of the persons involved in working out the draft of the General Principles, M. Raman, chairman of the LaSSR Gosplan, has already stated in the weekly (EKONOMICHESKAYA GAZETA No 11) how tense and difficult it was to develop this document, the sharp debates involved and the many different searches for wording that was mutually acceptable. But what are your impressions? What lessons may be learned for the future from the procedure used in drafting a fundamentally new document which contains such far-reaching objectives?

[Kravtsov] Well, the document was really born in torment, as they say. And this is understandable: after all, it essentially is aimed at fixing the limits of the competence of the USSR and the union republics in management of the economic and social spheres. And the delimitation of competence is always difficult. It was necessary to think it through carefully, discuss it, and find the mutually acceptable alternatives. It was also complicated because the majority of questions involving management of the country's economy are now being resolved at the All-Union level. As a matter of fact, this is mentioned in the Constitution of the USSR as well. Under Article 73 of the Constitution, the conduct of a unified social and economic policy and management of the country's economy is considered to be under the jurisdiction of the USSR.

Restructuring of the economy and the social area in union republics is aimed at eliminating unnecessary centralization and extending the republics' rights.

Management of those areas of economic activity which are directly linked with meeting the requirements of the people and the social area should be concentrated to the maximum extent possible in the republics and in the local areas closest to a specific individual. At the same time, extension of the independence of republics and regions should not lead to ruin of the integration that has already been achieved and disruption of cooperative relations. In other words, decentralization should not lead to economic chaos.

These are the common ideas, so to speak, that are basically shared by all those taking part in preparing the draft of the General Principles. However, it is understandable that there may be different ideas about the degree of decentralization with respect to specific directions, sectors and spheres of activity. And it was important here to bring about a rapprochement of positions, to carefully take into account the broad spectrum of opinions, particularly by those representing the union republics, and to give consideration to the proposals which later became the basis of the draft. I think that on the whole we succeeded in performing this task.

It is significant that discussion of the questions at issue took place in an atmosphere of goodwill and an open exchange of opinions, in the form of a free debate. Each one of the participants was able to frankly express his view on a problem and to suggest one alternative or another to resolve it.

Even the extreme points of view were not rejected "at the outset," as they say. All arguments were carefully considered; we sought to bring out the rational core in each of them, and to take into account the realities which dictated one suggestion or another.

It is characteristic of the commission's work that the participants always sought to reach a consensus, even a compromise, if you like, on the questions at issue. I think that this was basically achieved.

Well, regarding the lessons for the future... I would like to have the drafts of decisions that are being prepared more "linked up" with each other in the future. After all, other groups were engaged in work on the preparation of documents to set limits on the competence of the USSR and the union republics, on local self-government, the local economy and other matters at the same time that our commission was working.

Of course, we tried to ensure that "our" draft was coordinated with the documents being prepared on these questions. But bringing about a complete "linkup" at a given stage is quite difficult—after all, the preparation of these drafts was still far from complete, and for this reason they essentially had to be compared with just their special preliminary working versions, so to speak.

Nevertheless, this complication in the current period, a period of rapid updating of legislation stemming from the restructuring, is in general completely explainable: the reforms cannot be put off. If, for example, we begin preparing a document regulating the economic relationships between the Union and a republic only after questions of a more general nature, let us say, in the field of interethnic relations and improvement of the Soviet federation are resolved, adoption of the decisions needed could be dragged out. But we cannot allow this.

And lastly. In working on the law we have to make use of the positive experience accumulated in preparing the draft of the General Principles. Everything positive and valuable that will be acquired in the course of the nationwide discussion of the draft General Principles will have to be taken into account in the draft of the law.

[Gnidenko] In a number of readers' letters the text submitted for discussion is called "a draft...of drafts." This means that the materials for discussion will be used as the basis for new drafts for new legislation. The question arises in this connection: wouldn't it be better to submit the drafts of new laws for discussion right away?

[Kravtsov] I do not think so. A law juridically formalizes the predominant or prevailing moods, ideas, and will of the people. For this reason, in order to obtain a good law, it is first necessary to have a clear, accurate conception of the kind of ideas that should be embodied in it, what precisely "is required" of a given law. In other words, a kind of "social order" is needed for one law or another. In this sense, it is desirable to begin organizing specific legal norms after the concept of the law itself has "crystallized."

The draft of the Common Principles, strictly speaking, is a draft of a concept, the direction in which preparation of the future law should be conducted. And without a clear presentation of this direction and approval of the concept, taking into account the views existing in society and the pluralism of opinions, and finally, the public response which will follow publication of the draft General Principles, it would be premature to begin discussion of the law, in my view.

After all, the questions which are supposed to be resolved in it are very important. This concerns the bases for economic relationships between the Union and the republics.

Of course, I would not want to be understood as implying that the law is a secondary matter. Not in the least. The legal document which regulates these relationships will be a law, of course, not the General Principles. It is precisely in the law that we have to work out the mechanisms for the realization and legalization of the concepts incorporated in the draft of the General Principles. This is not a simple matter at all, and I will say frankly that there will be a considerable amount of work here. Especially as on the whole, a law such as this is unique in our country. Previously, under a system of centralized management of the economy and the social sphere, the question of such things as a mechanism for the responsibility of the Union and the union republics for nonfulfillment of mutual commitments, mentioned in the draft General Principles, simply would not have arisen, as an example. There was no responsibility and there was no mechanism, either. And there are quite a few such questions.

[Gnidenko] What significance, from a legal point of view, do you attach to the provisions on self-government and self-financing of the republics?

[Kravtsov] Well, in the first place, the General Principles are not a law yet. As I already said, this is now only a concept for restructuring management of the economy and the social sphere in the union republics, a path and a direction in which we have to move. For this reason, it is simply premature to look for juridical significance in this or any provision or term in the document, which is not a legal document and was not intended to be one, and to give it a juridical definition. Especially as this concerns economic categories. Its juridical embodiment and the precise legal determination of the ideas formulated in the draft General Principles should be found in the law.

Secondly, if I caught the hint in your question correctly, certain readers are expressing doubt about the correctness of using the terms "self-government" and "self-financing" as applied to the union republics. After all, it is common knowledge that they are state formations, and it is customary to use the term "sovereignty" as applied to states.

There is no contradiction here, in my view. In the title of the draft of the General Principles itself, it states that restructuring of management of the economy and the social sphere in union republics is being implemented on the basis of extension of their sovereign rights. The connection between reforms in the economic area and improvement of the state system and reform of the political system is thereby emphasized.

We have used the terms "self-government" and self-financing" thus far basically to characterize the principles of activity by state and cooperative enterprises.

Right now, as stated in the draft, we have to take the next step in reaffirming these principles—extend them to the sphere of territorial economic operation, extend the economic independence of the union republics, provide for efficient distribution of powers among union, republic, and local organs, and work out a legal mechanism to protect the interests of regions.

In this sense, the republics' shift to self-government in the economic area and self-financing is a completely natural condition in extending their independence in this area, a method of implementing the principle of Soviet federalism—a strong center and strong republics.

The nature of the principles of self-government and self-financing as applied to the union republics and regions was stated in Point 4, Section 1, of the draft General Principles. I will not repeat them; I will note only that the contours of the future legal embodiment of these principles in a law are seen in a number of sections of the draft. For example, let us take Section 3 of the draft General Principles, "Strengthening the financial base and budgets of the union republics." It envisages replacement of the expenditure mechanism which now exists in forming union republics' budgets with a new mechanism which will make it possible for union republics to be true masters of their own budgets and will grant them broad powers in planning and implementing budgets. The basic ways of reaching this objective were also named.

The same may be said about other sections in the draft.

[Gnidenko] I think that what is being submitted for broad discussion will be subject not only to universal approval, but to criticism as well—to more precise definition and development of individual provisions, and even to the overall direction of the main decisions being prepared. Couldn't you "forecast" where the attention of the draft's authors may be drawn first of all by

jurists and the "regional" economists, by the department managers and the representatives of soviets? In other words, can't the vulnerable parts of the document, those which may evoke the sharpest debate, be named selfcritically?

[Kravtsov] I would not like to repeat myself, but it is apparent that I have to give a more detailed answer. The draft of the General Principles is not the draft of a law. It is a system of ideas that has been arranged in a logical order, a starting point for specific legal regulation. For this reason, this draft cannot be approached with the same measures used for approaching the draft of a legal document—a future law. If the General Principles were viewed as a normative act, it would be quite natural to find a great number of gaps, the lack of a number of the necessary legal norms and juridical mechanisms to implement one idea or another. And from the viewpoint of the form in which the document is set forth, jurists would find something critical to say. There are definite traditions and rules in organizing and formulating legal norms and requirements which they must meet.

Any jurist will tell you that a law should not be declarative and that it does not need an abundance of provisions and appeals. The norms of a law should be extremely clear and precise and should rule out the possibility of different interpretation. The law itself should be concise.

Political meaningfulness of a law is achieved, as we know, not with the aid of a political phrase, no matter how great the temptation to use it is, but by the substance of the legal norm itself. The first laws of the Soviet state, the Leninist decrees, can serve as an example of this. They are a model for us even today—every thought in them has been sharpened and set forth precisely and concisely. There is no revolutionary phrase in them, although they also consolidated the gains of the revolution.

This is the difference between political and legal documents. No one denies the political nature of laws, but their specific nature is that they express political ideas and lines in a certain way, and if you wish, in a certain form.

For this reason, I do not think it would be correct to look for provisions that are "vulnerable," as you put it, in a document that is not a draft law. Each document has its own requirements. As a political document and as a direction in economic reform, the General Principles are quite clear, I think.

It is another matter, it seems to me, that a law should look different from the General Principles. There is scarcely any point in "rewriting" general postulates and wishes into it. Putting one provision or another of the General Principles in a legal document does not mean that it is necessary to reproduce them word for word. Repeated invocations on the need to reinforce responsibility, for example, or improve quality, let us say, or

speed up scientific and technical progress, no matter how many times we repeat them, will not strengthen the law one iota if it does not have the specific legal mechanisms to provide for realization of what we wish to achieve.

As far as development of these legal mechanisms is concerned, no one is relieving us of this task, naturally. We understand very well that a number of the provisions in the draft General principles will require very substantial work, precisely from the viewpoint of their realization in legal norms. For example, let us take a provision in the draft such as the preference of republics in concluding agreements with enterprises of union subordination located on their territory for the delivery of commodities and products and for the performance of work and services above what has been established for these enterprises by the state order. A very important and fundamental provision, I would say. But once again, this is only an idea. After all, it still needs to be embodied in a law and specific legal norms. At the same time, we need to provide a mechanism for the republics to realize this right which does not infringe upon the rights of enterprises stipulated by the Law "On the State Enterprise (Association)."

It is not coincidental that the draft of the General Principles especially emphasizes: an increase in the economic independence of territories should not infringe upon the cost accounting rights of the basic production component—enterprises and associations—and lead to replacement of the administrative-command dictates of union ministries with the dictates of republic and local organs. They are obligated to build their relationships with state and cooperative enterprises in strict conformity with the Laws on the State Enterprise (Associations) and Cooperatives and to assist in the realization of their rights in every way possible.

We have to ensure more thorough coordination of the draft of a future law with other documents being prepared, primarily with the draft of the Law on Local Self-Government and Local Economic Activity.

To sum up what has been said, I do not think that the draft of the General Principles contains anything that is "highly explosive." But there is still a great deal of work ahead.

[Gnidenko] It was noted at the last session of the CPSU Central Committee's Socioeconomic Policy Commission that discussion of the draft of the General Principles should become a powerful generator for improvement of affairs everywhere in the country's national economy. What needs to be done for this, in your view? Doesn't this mean that preference will be given not to the new ideas and concepts which will emerge in the discussion process but to the businesslike proposals which can implement new projects right away?

[Kravtsov] You are asking me a question as a jurist, and accordingly I will answer it as a jurist. Suggestions and ideas whose realization requires changes in legislation and the development of new legal documents can be put into practice only with the appropriate legal support. It would be legal nihilism to believe that such proposals can be implemented without approval of the appropriate legal documents. I believe that this would be incompatible with the ideas of building a legal state.

What has been stated does not mean that all businesslike proposals must be put off—this is not the point. But we must respect our own laws. If one of them prevents movement forward, it must be changed, or repealed, or a new law must be drafted. Until this is done, we are obligated to follow the one in force.

It is another matter that some proposals may be implemented now, within the limits of existing legislation. We must consider them, of course, and give them all our attention without cutting ourselves off by references to the drafting of new plans that is under way. The latter are necessary, of course, but let us ask ourselves, with our hands on our hearts: do we always make full use of what we already have? Both our leaders and the population need to be legally well-informed here; legal culture is needed, if you wish.

Returning to the question, I would say that discussion of the draft really should play its role in improving affairs in the national economy because the ideas on the economic independence of the republics and regions and the prospect of real improvement in people's lives acquire specific outlines in the draft of the General Principles. A real and obvious prospect will make its appearance. This cannot help but affect the attitudes of the people and their regard for the work.

As far as preferences are concerned, I would say this: new ideas are necessary, and now in particular. Although they are not bread, they also nourish mankind. And they even rule the world, they say.

LaSSR Gosplan Chairman on Regional Autonomy Decree

18200306 Riga SOVETSKAYA LATVIYA in Russian 24 Mar 89 pp 1, 2

[Interview with M. Raman, chairman, LaSSR Gosplan; deputy chairman, LaSSR Council of Ministers, by Yu. Chernyavskiy]

[Text] Many different documents are presently being drawn up and applied in the course of the radical economic reform. One, it is said, is more important than another. But our republic probably has not awaited any of them with such interest as the recently published Draft General Principles of Restructuring of Management of the Economy and Social Sphere in Union Republics Based on the Expansion of Their Sovereign Rights, Self-Management

and Self-Financing. After all, the idea of republic economic accountability originated in the Baltic republics; several models of it have been developed in Latvia alone. Many scholars and specialists have been drawn into the polemic surrounding various aspects of regional economic accountability.

The discussion will unquestionably now flare up with new force. Many of our readers will obviously also take part in it. Today the editors invited M. Raman, chairman, LaSSR Gosplan; deputy chairman, LaSSR Council of Ministers, to take part in the discussion of this timely topic.

[Chernyavskiy] It is said that regional economic accountability is knocking at the door. Miyervald Leonidovich, without going into detail, how would you evaluate in the most general terms the draft that is offered for the scrutiny of specialists and the public?

[Raman] First, as stated in the General Principles proper, the proposed model of self-management and self-financing is the first stage of economic accountability which will gradually be improved as the political and economic reforms gain momentum and as experience in regional economic management is acquired.

Second, this is a model according to which our entirely centralized economy will be significantly decentralized because the republic's jurisdiction will extend to the entire agroindustrial complex, construction, to the entire social infrastructure with its facilities and social benefits, to environmental protection problems, and in large measure to the production of consumer goods and services. Republic jurisdiction means that republic administrative organs make various decisions independently without these decisions being centrally examined and coordinated and naturally bears full responsibility for them. Hence it can be said that initiatives acquire a new quality, that they will be examined and correspondingly resolved much more efficiently.

Third, we must discuss which formula of Soviet federalism is better—a "strong center and strong republics" or "strong republics and a strong Union"—a thesis that has evolved of late. I prefer the second variant.

[Chernyavskiy] As far as I know, you participated in the drafting of the General Principles. How was the document created? Which schools of economic science, which famous economists put their hand to it? Today the question is in my view correctly raised that there should be no more nameless laws drafted in the silence of departmental offices.

[Raman] The document was created by a commission that was formed by an order of the USSR Council of Ministers and headed by Yu. D. Maslyukov, chairman of the nation's Gosplan. But most of the work on the commission was done by his deputy: Academician S. A. Sitaryan. The commission also included academicians L. I. Abalkin (an economist) and V. V. Laptev (a jurist).

Unfortunately, Academician G. I. Marchuk, president of the USSR Academy of Sciences, did not participate at all. There were also a number of executives of union economic departments and gosplan chairmen of all union republics.

I cannot name any economic school because in our country there are no schools that deal with such questions. And in general there has not even been any scientific spadework on these unprecedented problems. Public discussion will obviously suggest interesting ideas on improving the General Rules.

[Chernyavskiy] What was the nature of participation of Latvian specialists in the writing of the draft? In particular, to what extent were our proposals, especially the principles of economic accountability that were coordinated last fall in Riga by representatives of the three Baltic republics and that were unequivocally received even by you, considered in it?

[Raman] The documents were prepared from the end of November to the beginning of January and were discussed in a number of intermediate stages by republic scholars and specialists. There were many comments and corrections stemming in particular from the basic principles of republic economic accountability that were coordinated last fall in Riga. But as I have already said, this document was only the first stage on the road to republic economic accountability. Therefore, of the four sections that were coordinated in the basic principles of republic economic accountability, only a certain part of these principles was included in the model of self-management and self-financing. Those that, in your words, were unequivocally received by all members of the commission.

[Chernyavskiy] In my view, the draft we are discussing is too wordy—it is difficult to discern the main points. What fundamentally new ideas does it contain? It frankly seems to me that the "long ears" of the old economic mechanism are sticking out of many of its provisions.

[Raman] You are right. The document is indeed too wordy. Unfortunately, we, too, have not managed to abandon this tradition. At the same time, certain comrades who discussed the document prior to its publication wanted to see it still more voluminous, virtually as instructional materials. But after all, we are only talking about general principles.

I would call the following the most fundamental innovations: the decentralization of the branches and areas I have already mentioned in the national economy; total independence in compiling, approving, and executing the republic budget as well as city and rayon budgets; forming the budget on the basis of revenues; radical reduction in [the number of] plan indicators and thereby the independence of the rayon, city, and republic in the adoption of various planning decisions. The "long ears"

remain in questions relating to the state order. I hope that the provisions in this section too will soon be developed in the direction of creating the prerequisites for the gradual formation of our all-union socialist market.

[Chernyavskiy] Are there any controversial ideas?

[Raman] Yes, in my view, there are some. For example, the paragraph dealing with the transfer of union enterprises specializing in consumer goods production to the republics. It specifies a condition that limits this transfer. Also controversial are formulations of state functions regulating the budget-financial and monetary system; the articulation of policy in the area of price formation, wages, employment and a number of others. After all, if we repeat the previous centralization on these questions, the so-called regional factors of development will not be revealed and hence the effect from selfmanagement and self-financing will be minimal. Hence the need for a major coordination effort between republics and the corresponding union organs to determine the boundaries of this regulation and policy in these spheres. In my view the barest minimum of functions should continue to be centralized. Incidentally, a good precedent has been set by placing the taxation of cooperatives entirely under the jurisdiction of the republic.

[Chernyavskiy] Perhaps at the very beginning there should have been a determination about property. For example, making the means of production the joint property of the work collective and the state (republic or Union). Then it would immediately be clearer who should receive which part of the income and who should pay whom for land and other natural resources.

[Raman] There were major discussions of property. Based on the fundamental principles of republic economic accountability, we proposed that all natural resources, industrial enterprises, banks, and objects in the social and production infrastructure be made the property of the republic. What prompted this proposal? First of all, the desire to overcome man's alienation from public property. It is no secret that it has essentially become ownerless. It is a heartache to see how people mistreat it, how they are losing their feeling of being the master.

It appears that things will go significantly better if the workers themselves become the masters at the plant and the peasants become the masters of the land. It was therefore proposed that the USSR Supreme Soviet delegate the corresponding rights in the name of the people to the republic Supreme Soviet and that the latter in turn delegate them to the local Soviet of People's Deputies. The Soviet of People's Deputies in turn would transfer these rights to possess, dispose of and use a plant, land or other object on a contractual basis to a work collective or peasant.

Our opponents argue that this will weaken the status of public (state) property that is fixed in the Constitution of the USSR. In their opinion, there are serious dangers that union dictates will be replaced by local, no less rigid dictates, and that as a result, enterprises and work collectives will not receive the independence that they were given by the Law on the State Enterprise and that they especially need for the success of the economic reform. We disagree.

[Chernyavskiy] The draft states that regions are authorized to create nonbudget funds which will receive fines for polluting the environment and for the incomplete use of raw materials by enterprises. On the one hand, this is more than logical. But will this not prompt local authorities to merely "milk" enterprises instead of constructively participating in the resolution of difficult ecological problems. The advantage is considerable.

[Raman] Such fears may of course be founded because we cannot live without extremes. But through our common efforts, we will have to find the golden mean so that enterprises would bear appropriate responsibility for damage caused to nature on the one hand and so that there would be a certain reasonableness on the other. But together with this there must also be extreme positions. If the damage exceeds the allowable limits, the given technological process must be discontinued. But it would be better if there were no such fines whatsoever. Enterprises would be ecologically pure, according to the current saying.

[Chernyavskiy] How would one resolve the question of siting a new atomic power plant based on the proposed principles. Speaking in Kiev, M. S. Gorbachev firmly stated that we absolutely need atomic power plants. But is there a rayon, oblast or republic today that is willing to accept an atomic power plant in its vicinity? How in your opinion should the USSR government act in such a case?

[Raman] The criteria in such cases should obviously be worldwide. It should be profitable for a region—rayon, city or republic—to accept an ecologically dangerous production facility. It is essential that there by total mutual agreement. The criteria are as follows: totally safe operation of a given production facility and corresponding financial and material contributions by its owner. It is not the present situation when a city or rayon realizes only unpleasantness and almost no profit whatsoever from the siting of a hazardous production facility in its vicinity. You have correctly noted that this point is as yet not sufficiently reflected in the General Principles.

[Chernyavskiy] The functioning of economic accountability at various levels—from the enterprise to the republic—obviously requires, in addition to everything else, a free labor market. Is not the decree recently adopted by the LaSSR Council of Ministers and the Latvian Republic Trade Union Council "On Measures

to Curb the Unsubstantiated Increase in Population and to Regulate Migration Processes in the Latvian SSR" a step backward in this sense?

[Raman] I think that there are two separate questions here. First, the development of the national economy must be commensurate with our limited labor resources. This thought is incorporated in the new redaction of the Draft Conception of the Economic and Social Development of the Latvian SSR. Second, this decree first and foremost defends the interests of the republic population, which is also constitutional, and thus advances the social aspect of our development against the production aspect to the forefront.

[Chernyavskiy] As a nonspecialist, I am not entirely clear on the following point: "In the interest of economically substantiated distribution of turnover tax on individual types of products among union republics, it is proposed to introduce as of 1991 a procedure whereby part of the turnover tax on cotton and woolen fabrics, knitted goods and products made from them, sheepskin coats and fur products, tobacco, and wine stock realized in the final product is transferred in proportion to labor expenditures to the budgets of union republics where the corresponding raw materials or supplies are produced." Please explain what this is about.

[Raman] This is our financial innovation which, if accepted, will be introduced with the 13th Five-Year Plan. Up until now turnover tax is calculated only on the basis of the final product and this offers a certain advantages to the republics that produce it. For example, Uzbekistan, which grows cotton, or Kazakhstan, which mines copper ore, receives no turnover tax whatsoever. If the new statute is introduced, turnover tax will be collected in all phases of the birth of a product. One part will go to Uzbekistan for growing the cotton. Another part will go to a second republic for producing the fabric. The third republic will receive part for producing readyto-wear clothing from the fabric. Turnover tax will thus be formed on the basis of the so-called value-added [dobavochnyy] principle that has already been introduced in many other countries. This will eliminate a certain amount of injustice that has been correctly indicated by representatives of extractive and raw materialsproducing republics.

[Chernyavskiy] As is known, our republic will be converted to the new model on 1 January 1990. How do you assess the preparatory work since not so very much time remains?

[Raman] At the present time, this work should be assessed as insufficient. This was also stated at the bureau of the Latvian CP Central Committee at the time my report was heard. Thus far, only Gosplan and the

Ministry of Finance are working. But there is no end of work for ministries, departments, enterprises, organizations, and Soviets of People's Deputies. This was noted in the corresponding decree of the LaSSR Council of Ministers that was adopted in January. But as usual we are very slow getting started.

Not long ago, corresponding reports by Gosstroy [State Construction Committee] and the Ministry of Housing and Municipal Services were heard. In both cases, the work was declared absolutely insufficient.

Therefore, today, in parallel with the examination and discussion of the published Draft General Principles, there is need for a precise practical effort which, I repeat and emphasize, must develop new local or interbranch economic mechanisms that would yield a far greater return under our republic's conditions. These are the elements of the so-called regional factors of development which we must use for more accelerated development.

To date the only good example in my opinion has been the article "Kalna braucot, zirgus neparjudz" by engineer Andreyson in the 23 February issue of CINE in which the author examined in detail shortcomings and flaws in today's construction planning mechanism. I agree entirely with the questions raised by him and we will immediately study and create a new construction and planning mechanism in our republic. Incidentally, we have already discussed these questions with our planners: they have pointed to considerable reserves that can be used after the transition to the new model of economic management.

And such questions exist in agriculture, in the entire agroindustrial complex, transport, industry, and the social sphere. In this connection, we are expecting suggestions from specialists and in Gosplan we are opening a special bank of ideas on republic self-management and self-financing. We ask all readers to send us their proposals, if possible with the appropriate mechanism for their implementation. We will be very grateful.

It should be emphasized in conclusion that both the preparatory period that has already begun and work according to the new model of self-management and self-financing do not promise any easy days. There is a need for responsible work with a high return. I take just one area—product quality—as an example. Without high quality, there will be no competitiveness and no additional growth of national income. But high quality output is the result of quality labor.

And so it is everywhere. The better we work, the better we will live. These words are finally acquiring more real meaning today.

[Chernyavskiy] Thank you for the interview.

AGRO-ECONOMICS, POLICY, ORGANIZATION

Readers Respond to Price-Reform Debate

Conclusion of Discussion on Price Reform for Agricultural Products

18240077 Moscow SELSKAYA ZHIZN in Russian 3 Mar 89 p 2

[Article by Doctor of Economic Sciences P. Klemyshev under the rubric "Debate Rostrum": "Evading a Direct Answer"]

[Text] The article by Goskomtsen [State Committee on Prices] Chairman V. Pavlov "Has the Pricing Balance Been Disrupted?" (SELSKAYA ZHIZN of 12 Jan 89) elicited lively interest among readers. The editors received many replies. Some of them were printed. Today we are completing the publication of materials associated with the problem of price equilibrium. We hope that the opinions of specialists, scholars and the executives of agencies that have been expressed in the debate will be reflected in the discussion of the problems of the APK [agro-industrial complex] at the upcoming CPSU Central Committee plenum.

As a reader of the article by USSR Goskomtsen Chairman V. Pavlov, I must say that I was disappointed. A direct and candid explanation of the prevailing situation in prices for equipment was not received from a key executive of such a high rank. The author reduced complex problems to a single individual issue: the principles for establishing prices for new equipment. Even in that, however, he did not remain objective.

The author begins the story of price formation for agricultural output with the period following the May (1982) Plenum of the CPSU Central Committee. The rise in procurement prices starting 1 Jan 83 undoubtedly played a positive role. V. Pavlov feels that radical changes in economic relations between the city and the town and a revival of the financial condition of the farms have occurred as a result. Let us turn to the indicators.

In 1987 one tenth of the kolkhozes and 17 percent of the sovkhozes were operating at a loss, and 47 and 53 percent respectively were operating at low profitability (up to 25 percent). The state of working capital on the farms was unsatisfactory as well, and as is well known, the uninterrupted progression of expanded reproduction in agriculture depends on that. Some 70 percent of sovkhozes and 90 percent of kolkhozes had a shortfall in working capital at the beginning of 1988. The availability of internal working capital on them totaled 40 and 22 percent of the standard respectively. The overall shortfall of internal working capital for agriculture overall reached 70 percent of the standard volume. There are also no few farms, according to the data of the USSR Agroprombank [Agro-Industrial Bank], that have completely lost their internal working capital. Some 12,000

kolkhozes and over 5,000 sovkhozes had a balance of illiquidity of about 22 billion rubles across the country overall. The bank-loan indebtedness of farms in the APK in 1988 exceeded 244 billion rubles, of which some 64 billion rubles were deferred or overdue loans to kolkhozes and sovkhozes.

Can we really feel under these circumstances that the 1982 prices, with all of the subsequent corrections to them, meet the requirements of the conversion of the kolkhozes and sovkhozes to self-financing overall? These prices, like all the preceding ones, do not have the requisite economic substantiation. This is testified to first and foremost by the presence of sharp differences in the conditions of profitability across the union republics, krays, oblasts, administrative regions, individual farms and sectors of agriculture—animal husbandry and cultivation—and, finally, for individual types of output.

Can we really expect the rapid solution of the problem of providing the population with meat products if they are the least profitable or even entirely unprofitable for the producers? The production of meat is unprofitable in the Uzbek, Kazakh, Georgian, Azerbaijan, Moldavian, Kirghiz, Tajik and Turkmen SSRs, even though there exist favorable conditions for the development of animal husbandry in all of these republics. The production of pork is unprofitable in the Ukraine even though it has been one of the principal food products of the local population since time immemorial.

Material incentives for the production first and foremost of the most important and scarce types of agricultural output should not only be acknowledged in words, but implemented in deed as well. This requires a most serious restructuring of the whole system of procurement prices. An overall decline in the levels of procurement prices for agricultural output is one of the chief drags on restructuring in the agrarian sector of the economy.

The origins of distortions in the formation of prices for agricultural output go back to the end of the 1920s and beginning of the 1930s, when the implementation of industrialization required conversion to extra-economic forms of mutual relations between the state and agriculture and the withdrawal of agricultural output from kolkhozes and sovkhozes in the form of state procurements at artificially diminished prices. Fiscal policy in relation to agriculture was entirely subordinate to the task of the non-equivalent mobilization of its surplus and, to no small extent, essential product for the income of the state.

We have unfortunately not gotten rid of such practices even today. The principles for determining procurement prices and organizing procurements of agricultural output that were established at the moment of the birth of the kolkhoz order in the USSR remain unchanged even today. They are also being preserved in the course of the reform of the mechanism of economic operation that is underway today. Their essence consists of the fact that

an overwhelming portion of the commodity output of kolkhozes and sovkhozes is sold to fulfill compulsory targets for the sale of products to the state at fixed and centrally established procurement prices. These prices are at the lowest level compared to other types of prices. The farms sell their excess commodity output beyond the plan to the state, consumer cooperatives or on the market on more advantageous terms and at higher prices. The idea of incentives for the production and sale of output by kolkhozes and sovkhozes implicit in this system does not work in practice, since the second share of the output does not exist or is very small.

The main problem is connected with the principles for setting the size of the procurement prices. The average zonal costs of production are taken as their foundation. They are set lower than the level of the public price, which for agriculture is the price that is determined according to the costs of production of the output obtained on the farms that have the least favorable conditions for production. The lowering of the overall level of procurement prices turns them from an incentive to increase production into a disincentive and leads to mass unprofitability or low profits for the farms and the disruption of finances, which is also confirmed by the data cited above.

The USSR Law on Cooperation states in Article 34.4 that "Prices for the output of cultivation of the principal specialization of each zone that is sold by cooperatives according to agreements for the performance of state orders should ensure the reimbursement of the costs of production and the receipt of the net income essential for expanded reproduction for cooperatives located in relatively poor natural and climatic conditions in the indicated zones." In citing this provision in the article, the author at the same time continues to make assertions as if the concept of constructing procurement prices according to the worst natural and climatic conditions had been abolished. A strange position! And it cannot fail to evoke doubts about how Goskomtsen will realize the Law on Cooperatives in the practice of developing new prices in the face of such an understanding of it. And after all, this principle, in my opinion, must without fail be extended to the sovkhozes as well.

The author reduces consideration of the question of cost equivalency just to the mutual relations of agriculture with industry in the acquisition of the means of production from it. But this is a broader issue, and it touches first and foremost on the mutual relations of agriculture with the state in deliveries of agricultural output. It is well known that an inflationary process exists in the country. Its annual rate, in my opinion, is reaching roughly 4-5 percent. And increases in procurement prices were carried out repeatedly before, but the impact of these increases was lost as a consequence of growth in the costs of production on kolkhozes and sovkhozes due to increases in the cost of all factors of production. After the increase in procurement prices of 1965, the average annual net income of agriculture in the 8th Five-Year

Plan grew to 9.5 billion rubles versus 5 billion in the 7th. But since procurement prices were not corrected with a regard for the increase in production costs in the subsequent period, the net income was decreasing all the time, and in 1980-82 it declined to 1.3 billion rubles a year on average. This means that agriculture has been almost completely deprived of accumulations.

This situation was corrected very late by the resolutions of the May (1982) Plenum of the CPSU Central Committee, which immediately in 1983 provided for growth in the rate of development of agriculture, while in 1980-82 growth had ceased completely. It must be noted that the new procurement prices that were instituted on 1 Jan 83 do not provide for the level of profitability that the 1965 prices did.

The rise in the level of profitability and decline in the number of unprofitable farms in 1988 is basically of a nominal nature, and their significance in the sense of a revival of the economy of the sovkhozes and kolkhozes should not be overestimated. New procurement prices were formulated with the inclusion in their fund of those additional expenditures that are charged to kolkhozes and sovkhozes under the new conditions of economic operation (abolition of budget financing of the capital investment of sovkhozes, cost increases of capital goods supplied to agriculture by industry, increases in the standards for deductions for social security etc.) in connection with the 1 Jan 88 conversion of the agricultural enterprises and organizations of the Gosagroproms [State Agro-Industrial Committees] of a number of republics to full economic accountability [khozrashchet] and self-financing. Such additional expenditures (according to reduced calculations) comprise some 30 billion rubles for all of agriculture, while in 1988 the profits of sovkhozes and kolkhozes grew by just 6 billion rubles. It is obvious that this sum cannot compensate fully for the increased needs of the farms for accumulation funds.

The author's biased approach to prices for equipment is surprising. He is sure that the complaints of agriculture are unfounded. Pavlov's position is such: everything that is bad depends on the negligence and mismanagement of the kolkhoz members and sovkhoz workers. The injustice of this attitude toward them is not noticed. It is moreover visible to the naked eye. It can be seen from the example of equipment and mineral fertilizers supplied to agriculture at commercial prices starting in 1988, prices that greatly exceed those in effect before that the author calls "privileged." The elimination of dual pricing structures for commercial capital goods was envisaged by the reform as a constituent element of a radical reform of all price formation, which also assumes the introduction of new procurement prices. But price reform is not yet being carried out on the scale of the whole country, and the abolition of the dual pricing structures for deliveries to agriculture as early as 1988 still does not lend itself to explanation from the point of view of common sense. This is just the latest financial whim in relation to the town. No privileges were ever offered to agriculture here.

The economic reforms of 1965-67 instituted the dual pricing system so as to avoid the repeat consideration of the new procurement prices just introduced and so as not to disrupt the cost balance implicit in them in the mutual relations of agriculture with industry. There were no "privileges" of any kind in this document for agriculture. It is strange that this has to be explained to the workers of Goskomtsen.

But there is another side to this issue as well. We turn to the yearbook "National Economy of the USSR in 1982." From it we find that agriculture at that time created national income of 144 billion rubles, but only 80 billion were realized in its own sector. The difference of 64 billion went, bypassing it, directly to the centralized fund of the state. The state budget, subsidizing machine building and the food industry, does so not at its own expense at all, but at the expense of agricultural funds. It could be asked just what privileges and subsidies to agriculture are being discussed.

Pavlov reproaches the workers of agriculture for the fact that they do not charge suppliers penalties for the incomplete delivery of equipment. But how can that be done and who can the complaints go to? The machinery, after all, is delivered by different plants. And the system of machinery for the mechanization of agriculture has only been barely half assimilated by industry overall. Who will pay a fine for the non-delivery of machinery that is not being produced yet at all or whose design has not even been developed?!

Machine building easily circumvents any techniques and the weak monitoring of Goskomtsen. It enjoys the connivance of USSR Gosagroprom itself.

New prices should be developed at all stages under the monitoring of the public. The food sector cannot get out of its dead end without scientifically substantiated price formation in the country. Formalistic replies in officialese on these issues, ignoring the real state of affairs, will only confuse public opinion.

Argument Against Reliance on Price Increases Moscow ARGUMENTY I FAKTY in Russian No 9, 4-10 Mar 89 pp 4-5

[Article by Doctor of Economic Sciences V. Chernyak, Kiev, under the rubric "Opinion of a Candidate for People's Deputy": "Are Price Increases Inevitable?"]

[Text] Who is to blame for the truly depressing state of agriculture? The violent methods of collectivization and the policy of ruthlessly pumping not only surplus product, but also essential product, out of it inflicted enormous harm on it. Collectivization was a digression from

the Leninist cooperative plan, a distortion of its essence. The "order of civilized cooperatives" was never created. That which was created is far removed from both cooperation and from civilization altogether.

Agriculture was ruined by the system of prices. Prices for output grew faster for agriculture than did prices for agricultural output. Surplus product was pumped from agriculture into industry, and it then turned out that agriculture could not supply the processing sectors of industry with raw materials.

"Meat and dairy" subsidies to agriculture currently exceed 60 billion rubles a year. A subsidy is a fee for mismanagement, for the inability to organize production, reduce costs and raise labor productivity. Subsidies do not stimulate growth in labor productivity. Unearned money does not make people more industrious. The farm receiving it does not want to reduce the cost of output. Subsidies do not cure. Many see a way out in raising prices for foodstuffs. But this is a deceptive appearance. Making extra payments through prices means to pay more for worse.

Wouldn't it be expedient to compensate for the unprofitability of agricultural production by improving management and increasing production efficiency rather than by raising prices? This is not simple, of course, but let us seek reserves in production and not in the consumer's pocket.

What does the way out consist of?

First and foremost raising the quality of equipment supplied to agriculture and lowering the prices for it. And for this it is essential to retool agricultural machine building, first and foremost rejecting the use of poorquality metals for the production of agricultural machinery. It is not simply new equipment that is needed, but new technologies for the utilization of raw and other materials within the framework of the agro-industrial complex.

Problem number one is raising the productivity of labor in agriculture and in the whole agro-industrial complex. Its solution is connected with the employment of intensive technologies, expansion of the specialization of agricultural production and the optimal combination of large-, medium- and small-scale production.

There are grounds to evaluate price increases for foodstuffs as the recognition of our inability to raise the efficiency of agricultural production and solve the food problem on that basis. But let's look around. China has found the strength to feed a population of a billion over 7-8 years. It is exporting grain. India also, while the USSR has become the largest grain importer in the world (30-45 million tons a year). There is no meat problem, there is a grain problem. The yield of grain crops in the USSR is significantly lower than in the countries with only slightly better natural and climatic conditions.

Grain yields in our country are 18 quintals/hectare. In Hungary they total 50 quintals/hectare, and in Holland grain yields are over 60 quintals/hectare. We moreover have farms where the yields reach 45-50 quintals/hectare with skilled management.

The arguments in favor of raising prices fade against the backdrop of these facts. We must raise yields, not prices.

It is felt that we must produce a ton of grain per inhabitant in order to solve the meat problem. This is in need of elaboration: with the presence of the corresponding feed and fodder industry. Animals assimilate less than half of unprocessed grain.

We have lost 25-40 percent of the fertile Chernozem lands over the last decade. The salinization of the soil has led to their complete removal from haymaking. Some 100 million hectares of land have been inundated. The dogma that land has no price is difficult to overcome. We need a legal land survey for the efficient management of the economy.

The question of selection work, improving the breeding of animals, improving the structure of the herd and replacing low-breeding livestock with higher-breeding animals has taken on especial significance.

Milk yields per cow are 2,700 kilograms in the USSR. They have crossed the 6,000-kilogram line in the United States and Sweden, and they are being overtaken by Holland and Norway, while England has crossed 5,000 kilograms and the FRG and Finland have reached it.

We lose roughly a third of the grain and almost half of all fruits and vegetables. Matters are thus not only increasing the production of agricultural output, but also getting what is produced to the consumer's table. And that is associated with developing the infrastructure and improving the storage and processing of agricultural output.

A significant portion of foodstuffs is harmful to the health as a consequence of pollution with toxic chemicals. A conversion to organic methods of cultivation is essential. Why produce food that cannot be eaten?

The whole point is that the impact of food price increases could be reduced to naught very quickly. We cannot radically solve the problem of unprofitability or low profits via prices.

The problem of prices is closely linked with the problem of profitability. The fact that deductions from profits are set depending on the level of profitability is a braking mechanism. The mechanism of economic operation has

been oriented toward increases in output and not in the level of management, not in the level of resource utilization. It is harder to provide for increases on a progressive farm than on a backward one. Enormous bonuses are paid for reducing the level of unprofitability. It is thus more advantageous for the manager of the backward farm.

The expansion of the independence of agricultural enterprises, the family contract and leasing and joint-stock methods of conducting farming along with the creation of real rather than formal cooperatives and agro-industrial combines and the utilization of individual forms of labor activity—this is the way of a radical solution for the food problem. Price increases can only play the role of an injection.

Leasing Problems As Viewed By People's Control Committee

18240092 Moscow SOVETSKAYA ROSSIYA in Russian 14 Mar 89 pp 1-2

[Article by I. Yelistratov: "Leasing Through the Eyes of the People's Control Committee"]

[Text] Today we no longer need to prove to anyone that leasing is a good thing. After all there are very few of them—open opponents to leasing—yet the situation is a difficult one. Why hasn't the high level of effectiveness of lease contracts become one of the main forces of the agricultural branch?

In order to answer this question it is essential to study the problem locally, as they say; specific study of the existing situation is needed. It was precisely this kind of work that the RSFSR People's Control Committee carried out in February of this year. The object of its study were the enterprises of the twelve RSFSR oblasts, those oblasts in which, as specialists feel, there are practically no alternatives to leasing—no other measures can revive the agricultural branch here. The preliminary results of this study were recently discussed at a joint meeting of the agricultural departments of the RSFSR KNK [People's Control Committee] and the newspaper SOVETSKAYA ROSSIYA.

The people's control committee did not establish any agitation-pressure goals for itself. To understand the reasons for the slow dissemination of lease relations and why sometimes excellent accounting data from localities regarding the number of lease collectives does not correspond to the achieved results, to help people to decide to begin independent work—these are some of the questions the control committee members dealt with.

The study results showed that one of the obstacles to the new matter is undoubtedly the notorious percent mania. The desire of directors to report on the "scope" of leasing in the old way and the striving "to look good" results in the fact that contracts are concluded in a

rushed manner, without sufficient economic development and preparation. This results in disruptions, in a conflict between the administration and leasees or even in a complete breakdown in relations.

Meanwhile enterprises which have moved to new forms of labor organization in a business-like manner and which have taken the common interests of parties into account have achieved very convincing results.

At Breeding Plant imeni Komintern, Pochinkovskiy Rayon, Smolensk Oblast, 88 leasees produced 44.2 percent of all of the enterprise's gross production; the output for each reached 22,000 rubles. For the sake of comparison, the remaining portion of the yield was produced by 219 workers...We can also compare the production cost of a quintal of weight gain in calves—for leasee livestock farmers it is 113 rubles lower than the enterprise average.

And here is an example of another type. Vyshegorskiy Sovkhoz of this same oblast has changed to leasing with its complete membership. The risk was not a small one—last year was dry, which directors of most enterprises, RAPO [Rayon Agroindustrial Association], agricultural combines and oblast agroproms used to justify product losses. Yet what happened in Vyshegorskiy? In 1 year of work under the new conditions gross production increased here by a little less than a million rubles, the average output per worker in farming—by 9,600 rubles and in livestock raising—by 621 rubles. The production cost of a quintal of grain decreased by 0.5 rubles and a quintal of weight gain in calves became 77 rubles "less expensive."

In this same region in Vladimirovskiy Sovkhoz two workers-leasees who fattened calves surpassed sixfold the average sovkhoz labor productivity.

Is this convincing? Of course. Nevertheless, as the KNK study revealed, these examples do not convince everyone by far. Neither specialists of the oblast agroprom [agroindustrial committee] or the RAPO have armed themselves with the experience that has been amassed; it is also being poorly used by the local means of mass information. In January of this year alone at the Safonovskiy CPSU GK [city committee] a council for economic information was created to finally generalize the experience of Vyshegorskiy, Vladimirovskiy and Pushkinskiy sovkhozes. With this kind of "efficiency" of administrative services it is no wonder that local specialists are stewing in their own juice, are studying and assimilating leasing by the trial and error method.

This is evidently the basis for the lack of balance in the distribution of leading forms of labor organization. In Ugranskiy, Temkinskiy and Rudnyanskiy rayons there are just one or two lease subdivisions, in Yershichskiy and Shumyachskiy—not a single one...In Kalinin Oblast there are 377 lease collectives today, a third of which are in three rayons and the remainder—in 33...The situation is no better in other oblasts.

Who or what is interfering with leasing?

These were the main questions. They were asked privately of specialists and directors of all rayons, kolkhoz farmers and sovkhoz workers. In three oblasts—Smolensk, Bryansk and Vladimir—a questionnaire survey was conducted in which about 1,000 people participated.

Sixty-two percent of those surveyed feel that the lease law is the main problem. The second problem is the high cost of technology and fertilizers and the third—poor material-technical supply. Also curious are responses to the question, "Why haven't you become a leasee yet?" A third of those surveyed gave this response: "I do not understand lease relations." Twenty seven percent said, "I am happy with the existing system of wages and labor organization." Another 22 percent do not believe that directors of enterprises will fulfill contractual obligations and will not swindle them.

Here the very high percentage of those who "are satisfied with the existing system" attracts attention. But there is nothing to be surprised about. In Krasnyy Lnovod Kolkhoz, for example, with a milk yield of 1,900 liters of milk per cow and with a grain yield of only 18 quintals per hectare the average wage is nevertheless 300 rubles per month. Where does the money come from? Why, from state subsidies. In this case should we hurry with leasing? The psychology of the worker paid by the day, as we see, has deep and strong roots...

The most, so to speak successful links, most firmly in favor of leasing, as the study showed, are family links. As a rule they are more "penetrating" in the conclusion of contracts, demand more rigidly the fulfillment "of everything that is written down" and demonstrate great independence in work. And they are waiting for a lease law with greater impatience than everyone else.

On what level, where, is the greatest opposition to the development of lease relations? On the oblast level? Rayon? Enterprise?

The answer turned out to be unanimous—on the level of the enterprise. And undoubtedly there is an explanation for this. While welcoming the liberation and rebirth of the peasant-master who will become the true owner of the land and the means of production very often today's real master of fields and farms is forgotten. The name of the real master is the administrative apparatus. It is precisely the very force which today is capable of tying the most independent farmer, cooperative worker or leasee into knots. And it has a powerful weapon in its hand—the contract.

Representatives of the KNK, in discussing what kinds of lease agreements they have seen, simply shrugged their shoulders—the imagination of the apparatus worker is inexhaustable when he is fighting for the familiar office chair.

In Sovkhoz imeni Frunze, Vladimir Oblast, the Makarov family fattens 100 piglets. Their request to include in the contract a point concerning the fact that they themselves have the right to dispose of above-contract production was categorically refused. In Lavrovo Sovkhoz the lease contract states, "The directors do not guarantee a 100-percent delivery of livestock for fattening." In Yerdenevskiy Sovkhoz, Kaluga Oblast, with the transition to leasing in livestock raising instead of a note on the volume of the finished product, assignments are included on average milk yield per cow and on the schedule for letting cows loose in the meadow...In Belinskiy Sovkhoz, Smolensk Oblast, the administration retains the right...to decrease wages for a violation of labor discipline in the lease brigade, and in addition if wages per worker exceed 6,000 rubles annually the worker must give 250 rubles to the enterprise for every subsequent 1,000 rubles he earns. Why? By what law?

And here is something completely incomprehensible—in Vladimirskiy Sovkhoz, Smolensk Oblast, the link for the procurement of vitamin-grass meal and the link for fattening young concluded a lease contract for a period of...4 months.

It is becoming clear that today the administration is utilizing the contract more often than not to confuse the leasee, to invalidate the essence of the lease and to deprive the individual of incentives for labor productivity. It happens thus: in all accounts the collective passes for a lease collective. But can we call it thus if, let us say, the contract includes this point, "Whenever requested, to place technology and people at the disposal of the administration. If this demand is not met...the brigade is deprived of all bonuses and supplements" (Belinskiy Sovkhoz, Pochinkovskiy Rayon, Smolensk Oblast). Or, "From the above-plan production, to allocate up to 25 percent to the brigade, but no more than 300 kilograms of vegetables per person or 50 kilograms of meat" (Vyshegorskiy Sovkhoz of Safonovskiy Rayon).

We repeat that the only purpose of these economic "explorations" is to tie the hands of the leasee and to turn his pockets inside out to show him that there is no point in his or anyone else's becoming a master. And another no less important detail—the more subtle the points in the contract the more computations and estimates are required and the "more necessary" the accounting service appears.

In general half of the leasees surveyed report complete adherance of administrative contract obligations. More often than not this is done by the family collective—65 percent. At the same time among those who in accordance with the questionnaire plan to continue work on a lease basis (over 90 percent fall into this category), they place the unfailing fulfillment of the contract on the part of the enterprise's director as a mandatory condition. Does this mean then that everyone has doubts about his honesty?

Why is it so easy for accounting services to pass down inflated contracts? Why is the lease so unprotected even though on the average, judging by receipts, the educational qualifications of this category of peasants is very high—one fourth have middle link specialists diplomas and 7 percent have a higher education...

The KNK names the absence of the necessary reserve of knowledge that is needed in working under the new conditions as the main reason for this. Most of the leasees turned out to be very poorly prepared economically. For example, they do not have a methodology for determining lease payments for land and for the means of production and this is why they so readily accept "on faith" a contract arrived at by specialists often without their own input. We have already stated what this results in.

It would seem that here it is—the field of action for scientists, economists and lawyers! As one of the participants in the study stated, it is a "gold mine" for this kind of knowledgeable specialist. Open a consulting service, see those people who have decided to lease, teach them the rudiments and how to find the "pitfalls" in contracts. The payment fee is based on a percentage of the leasee's income...

But no, we are not yet hurrying to acquaint him with information, to protect him with laws—on the contrary the administration even reinterprets existing law until it is unrecognizeable, adding to it instructions that have rotted with age. An example is the almost universal establishment of a ceiling on the wages for leasees. We know cases in which they must keep standard accounts on things ranging from expenditure of fuel to the wear and tear on buckets...

And what about directors of a higher rank-rayon, oblast? Very often on the podium they boldly support the lease whereas in practice all of the burden of the work is pushed onto the local people-do what you want. A. I. Ilenkov, first deputy chairman of the RSFSR KNK, characterized the situation: "Scientists are very farm from all of this, are not involved in leasing in earnest: it is possible to count on the fingers of one hand those who have gone to the village with their elaborations. On the RAPO or raykom level, will anyone casually ask-how are things going for farmers? The oblast-it can even organize a conference of leasees, moreover always the same ones, and to place a "halt" on measures. Thus the leasee is left one on one with the kolkhoz chief bookkeeper and chairman. And you won't take them with your bare hands...The curious thing is that we did not meet a single rayon or oblast director who would be categorically against leasing. Yet the matter is standing still or hardly moving..."

Who will help, let us say, to make a full agroeconomic foundation for the transition to lease relations of an entire enterprise—to calculate rent for land, determine the income structure of farm crops? Who will predict,

with a "computer in hand," that this is more advantageous to you whereas with this other you will most assuredly fail. Right now there is only one single consultation cooperative of this type—in Yaroslavl Oblast. In Kalinin Oblast an entire computer center belonging to VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin] remains idle due to underload...

The survey participants could not reach a general opinion when they touched on the theme of the so-called primordial transition to lease relations. What is better—for all enterprises to make the transition or to allow for the possibility of "peaceful coexistence" of old and new relations?

Really, if an enterprise changes to the new economic system with one move dozens of "zones of tension" are removed—everyone is equal before the lease. But are all enterprises ready to do this all at once?

Research has shown that the opinion of directors and specialists on this question do not coincide by far. In Smolensk and Vladimir oblasts such prospects are viewed negatively by 40 percent of those surveyed (the entire enterprise), and in Bryansk—60 percent. The arguments? Almost everyone brings up the same ones: "The collective is not mature enough," "Uncertainty about end results," "Leasing is for our future," "We must organize account-keeping and iron discipline."

I feel that even a short list of the opinions of specialists is enough to understand that a problem exists!

Here is the opinion of leasees themselves. It has become clear that despite all the shortcomings in the organization of lease relations plus the practically total absence of a dependable production agricultural technology and legal norms, people are nevertheless ready to continue to assimilate the new, are striving toward it. They are not afraid of the absence of a law, of the 12-14 hour workday, of the unbalance of procurement prices or of the direct arbitrariness of the administration. "All of that is nothing," they say, "Everything will come together. The main thing is that we have felt ourselves as people, have tasted freedom, even though not fully, and we have become masters of our own land. That is the main thing!"

Creativity in Introduction of Small-Group, Family Contracts Urged

Round Table on Contract Problems 18240053 Moscow SELSKAYA NOV in Russian No 3, Mar 88 pp 6-9

[Report on round table: "Creativity Is Recommended"; passages in boldface as published]

[Text] People of the most diverse social positions gathered at the round table at the Institute of Economics of the USSR Academy of Sciences: practical workers in

agriculture, managers, party workers, and scientists. All were united by interest in the following subject: family and small-group contracts in agriculture. Round tables, as the saying goes, have become fashionable. This free, democratic form of discussion of urgent problems makes it possible not merely to hear lectures and reports "kept within bounds," but to engage in a lively, open discussion not devoid of emotional color.

On the basis of the results of the "round table" recommendations were adopted. It is to be hoped that they evoked the interest of the departments involved in the problem under discussion. I would like to share what I heard with the journal's readers.

Out of the 21 points of the recommendations, in my opinion, those marked by the "seal of the times" are especially noteworthy: "Farm managers should support and develop initiative for the establishment of family and small-group contract collectives, selecting forms of their organization and stimulation depending on the specific tasks and goals facing the farm, in all cases ensuring their cost-accounting independence, and eliminating bureaucratic administration when deciding on matters concerning the diversion of members of these collectives or the funds assigned to them for other operations." Or the following formulation of the problem, which is not quite usual for such documents: "Attempts at imposing and routinely spreading family and small-group contracts without taking into account the readiness of the families and workers themselves for this form of labor, their initiative and interest in it, and the characteristic features of every specific farm should be stopped at all levels of economic management. Bureaucratic administration and routine should be considered the main danger for the fates of family and small-group contracts..."

L. V. Nikiforov, head of a department at the Institute of Economics of the USSR Academy of Sciences, who is familiar to our readers from publications in the journal, conducted the round table. No matter what one may say, the leader's position largely determines the discussion level. It seems to integrate and cement diverse constructive suggestions and shades of critical pronouncements, relegating weak points to the background and raising strong ones. I can transmit L. V. Nikiforov's views of the problem only briefly, in sketches.

He believes that the practice of the family contract (considered by some people an anachronism) confirms its efficiency under present conditions. The family contract restores in man the feeling of being the master of land and production. (How many years did we sadly crack jokes about the fact that "everything around belongs to the kolkhoz, everything around belongs to me" in the sense that the common is nobody's—swoop down on it, fellows!). The democratization of political and economic life in the country is the social basis for the family contract. The many difficulties of this form of

internal economic production organization are connected with the fact that democratization itself is still developing in a complicated manner, not smoothly.

The existing technical and technological base of kolkhozes and sovkhozes is not directed toward small-group and family labor organization (large farms and complexes and big sizes of crop rotations). The changes in the family structure and in the structure of workers in agriculture also makes itself felt (about 40 percent of the people living in rural areas are not connected with agricultural production). The traditions of family forms of labor organization have been lost, but now we are unable to go back to 1929.

However, it would be incorrect to wait until equipment and technology change in the necessary direction. The family contract can also be applied with the existing base, including at big livestock breeding complexes. It is necessary to generalize the experience of the diversified family contract, when one family is engaged both in plant growing and animal husbandry (in a small village and on a farmstead). If the size of one family is insufficient for this endeavor, cooperation among families, or with other collectives working on a contractual basis, is possible. It is also advisable to use the family contract on the basis of the private subsidiary farm, removing restrictions on the amount of the kept livestock, increasing land plots, and providing production and material assistance. At the same time, however, the leader stressed, it would be unjustified to replace the private subsidiary farm with the family contract—they have different functions. We must also remember that different forms of the family contract are possible in different regions.

Voluntary and mutually advantageous relations with the kolkhoz or sovkhoz and a high level of independence should be the indispensable conditions for small-group and family contracts. We must decisively eliminate routine and an artificial spreading of the family contract. Only people's real need and initiative can serve as a reliable basis for it.

Having made such a speech, it was as if he let the genie out of the bottle. There was an impression that those gathered kept their initiatives and ideas in a "hiding place," waiting for the opportunity to promulgate them. What a routine! Who, except stiff bureaucrats need it! Live practice has already devised and put forward so many new, at times contradictory, things. Not only different forms of the family contract have been testedwhen the production process is assigned to the family fully or partially, with and without the purchase of the means of production, on large and small plots, and with payments for above-plan products and on the basis of gross income... However, nor is the approach to the distribution of earnings within the family the same. Yet it was considered that everything was utterly clear and there were no problems in that area.

M. M. Amirov, deputy director of the Dagestan Affiliate of the Rosagroprom Center for Scientific Production and Labor Organization, threw in many interesting "small tasks" for the participants in the conference. In the autonomous republic the family contract has become widespread approximately since 1975 and on a mass scale, since 1980, basically, in labor intensive crops—in vineyards and in vegetable growing. Previously, those who worked on such a basis were called "hectarniks." "Hectarniks" were united into family links and the terms of the contract were changed, but the nickname remained in everyday life. So, the "hectarnik," as Amirov says, "takes the contract upon himself, but family members work." You will ask: Well, what is new here? Who does not know this? However, the Rosagroprom Center for Scientific Production and Labor Organization saw a problem in this: "It is a big difference whether the 'hectarnik' or the family assumes obligations. To whom should earnings be paid? Should leaves be on a higher scale? A person retires on a pension—will the pension be well-founded?"

One cannot say that there is no question here...

In Dagestan, when a contract is concluded with a specific person on a specific plot, at first it is estimated and determined how much land one person can cultivate (approximately 1.5 of the norm). However, if a person wants to take more, it must be understood that he will enlist assistants. Then all family members are entered in the contract. In the family, seemingly, it is easier to distribute earnings. Nevertheless, this business cannot be "farmed out" to the family—this conclusion was reached in the republic. The head of the family should have a higher coefficient: He has experience and responsibility. His wife and his brother can receive according to the payroll. But what is to be done with school-age children? When they work in student brigades, they receive both additional payments and bonuses, but in the family all this is not applied to them. "We try," Amirov explained, "to give part of the money (not through the cashier's office) directly to family members. After all, a 15- or 17-year old son works, for example, as a machine operator or in other jobs on an equal footing with adults and is interested in independent earnings.'

These arguments evoked a lively exchange of views. I. I. Kalutskaya from Mosoblagroprom attributed the Dagestan version to the region's specificity. "It seems to me that wages should not be divided among family members. I don't know how many people work according to the family contract—there is the family collective and that's it. And I don't try to know. These are Moscow's specific features."

Nor is this point of view indisputable. Apparently, we must not close our eyes to the fact that not every head of a family has an unquestionable authority and a respectful and sensitive attitude toward children. After all, children can "rebel," be lazy workers, or even completely refuse to participate in the contract. From the point of

view of family strength and maintenance of unquestionable parental authority the "Moscow version" is good. But from the point of view of fairness and direct personal interest on the part of young members of the family collective?

And so there can be no uniform formulas for this. Each time, when adopting a specific version of a solution, we will have to weigh everything "pro" and "contra" and to proceed from a specific situation.

The following suggestion also comes to mind: Changes should be made in legislation—age limits on drawing adolescents into labor—and then wage problems would also be solved more simply.

Land distribution is the next "burning question." Taking the contract, naturally, the family collective would like to receive a more fertile plot located more conveniently in the sense of the use of transport and so forth. However, others also want to work under favorable conditions. Where is the way out? The following thought was expressed: Plots of an average quality should be allocated to family collectives, but, if the best plot is allocated, higher plans should be given. (Specialists from the Institute of the Far East of the USSR Academy of Sciences said that in China this problem was solved as follows: The best land is given to those that cultivate it best).

The question of how to pay is not simple. Different approaches were also displayed here. In some places an additional payment for above-plan output (up to 12 salaries) is introduced. It would seem that this is good—there is a direct reason to increase production. This may be good, but production costs increase and the crop becomes unprofitable. Many managers argue: What do I need plan overfulfillment for?

In Dagestan, as in some other regions, wages based on gross income are applied. At the same time, much attention is paid to payment in kind. In plant growing it makes up 25 percent of the above-plan output on sovkhozes and up to 50 percent on kolkhozes. In this case additional payments are no longer necessary. This is profitable both for the farm and for the worker. People have become convinced of this wherever labor intensive crops, which are in big demand on the market, or are needed for private animal husbandry, are cultivated. For example, payment in kind is also practised in the cultivation of corn for grain and silage procurement.

The family contract makes significant corrections in working conditions. Everything is subject to expediency and the requirements of the technological process and the weather. "In this part labor legislation should be fully revised and family collectives should be granted the right to establish working conditions themselves," Doctor of Juridical Sciences G. V. Chubukov believes. "Since the family establishes these conditions itself, the farm does

not pay for overtime work and compensation for work during days off. But then the family collective should have material interest in working truly intensively."

The logic of thinking of V. N. Gorbanev, director of the Voskhod Sovkhoz in Kochubeyevskiy Rayon, Stavropol Kray, serves as an indication of the destruction of the formal approach to the concept of "labor discipline" and to the signs of a "good worker." He believes that on the Voskhod the family contract is unrealistic, because only one or two people from a family work on the farm. On the other hand, people actively engage in the introduction of collective and small-group contracts here. The economic and, I would say, psychological situation in the collective prompts this.

"The equipment utilization coefficient on the sovkhoz is such that equipment operates only during half a shift," the director said. "If we take into consideration that inflated reporting makes up approximately 20 percent, in fact, this indicator is even lower. We control the machine operator's every step and have taken away his initiative and creative attitude toward work. Perhaps today he has to work for 24 hours and tomorrow, half a day. However, existing forms of production organization make him work 'from' and 'to'—consequently, poorly. This is not reflected too much in earnings. In 10 years I don't remember a case in the rayon when someone was forced to correct defective work; for example, to replow the field. Man should return to land as its master. Let him decide, plan, and count independently. However, it is difficult to attain this in a big detachment. Whether one does much or little today, one must still go out to the field tomorrow. But contract collectives do not have to be forced to work. They themselves decide when it is necessary 'to press on' and when one can indulge oneself—work on the private plot and rest.

"True, if large collectives are broken up into smaller ones, problems with the crop rotation structure and the equipment set arise. Will small collectives be able to learn to come to an agreement among themselves and to share equipment? How to build cost-accounting relations among them? Thought should be given to this. The farm appears here in the role of a mediator among contract collectives."

I will not presume to say whether the Voskhod director will have fewer problems with small collectives than now. However, he had many supporters. Estonian milk-maid M. Gravinson, who works together with her husband on the basis of a family contract, thinks: "Where there are fewer people, there are fewer problems." Yes, there is a great desire to get rid of petty tutelage and regulation. The poll conducted in contract collectives showed: "The desire to work independently, with the whole family, and to realize oneself" is stronger than the craving for high earnings.

However, not everyone agrees with the Voskhod director. Having listened to him with interest, I. A. Demchenko, deputy head of the Agricultural Department of the Sumy Party Obkom, declared firmly: "We don't intend to divide [large collectives] into small ones. We are confident that we will find other methods of attaining profitability." But, it must be stated, there are still many unprofitable farms in the oblast.

In what direction do the people of Sumy Oblast carry out the search? Here is an example. Suburban farms, which, basically, are of a vegetable and dairy specialization, are forced to draw a large number of city dwellers into agricultural work—up to 1,500 or 2,000 per farm daily during peak periods. Not to mention other expenses, this means hundreds of buses, a paralyzed traffic in the city, and huge transport costs.

In Sumy the way out was seen in establishing permanent brigades out of city enterprise workers, who can leave their jobs for some time. Enterprise managers willingly agree to this, choosing, so to say, the lesser of two evils. There are also examples when two or three city families cooperate, concluding a contract with a sovkhoz for vegetable growing. In the oblast's rural areas the family contract is popularized poorly, although such collectives also exist—on small farms and in beekeeping.

Demchenko mentioned the reasons, which, in his opinion, held back the family contract. The negative attitude of fellow-villagers to the high earnings of "contractors" is one of them. (At that point the participants in the round table poured out advice on how to carry out explanatory work in collectives and in the local press). The people of Sumy are also concerned about the social situation of families working on the basis of a contract: "We seem to isolate the family that receives independence. However, the family contract should not take it away from the collective."

R. P. Ryazhskikh, chief of the Labor Department of the Tula Oblagroprom, was surprised at and concerned about many of the things heard at the round table: the bold approaches and unusual speeches about leasing, about the sale of equipment to contract collectives, and about Chinese experience, something of which was proposed for consideration and a tryout...

"We, in Tula Oblast," she said, "are held back by the shortage of people and small families. We distributed neither land nor livestock. In our oblast the development of the family contract does not proceed as, for example, in Sumy Oblast. If there is a family contract, it is on a kolkhoz basis. We apply the same laws that operate under the collective contract. The first family link exceeded the yield threefold during the first year. But the high earnings of contract workers disturb the remaining workers and kolkhoz members. People believe that the entire collective ensures success for the contract link... For now it is difficult for us to determine the production norm for the family. We don't know by what method it

is more correct to calculate the yield. At the same time, we realize how important it is to estimate the family collective competently. We are waiting for an answer from scientists: In what direction will the family contract develop? Really as in China?"

L. V. Nikiforov tried to dispel her doubts: "Discussing the leasing contract, I don't have in mind that kolkhozes and sovkhozes should be given up. The point is that under present conditions it is necessary to change internal economic relations on kolkhozes and sovkhozes and labor organization on them. With respect to hopelessly weak kolkhozes, which have no prospects to get out of unprofitableness, possibly, it is advisable to distribute their land under leasing contract conditions."

Doctor of Economic Sciences G. I. Shmelev gave additional explanations concerning the references to China's experience: "In what is this experience of interest to us? In the fact that the path of collective forms of labor, including of the collective contract, was traversed there. For now a better form than the family contract has not been found in China. It is another matter that, even when land is assigned to a family, the technical base should be improved, capital investments should be increased, and so forth, that is, production should develop in this respect as on kolkhozes and sovkhozes and not be kept at a primitive level."

The round table once again confirmed: Personnel training, information, and an exchange of experience and views are needed, especially as this experience and views are by no means unambiguous and a narrow application of small-group and family contracts has not always been justified. For example, this is what L. B. Baalandi, deputy head of the Department of Agriculture at the Central Committee of the Communist Party of Estonia, said at the round table: "We are asked: 'Why do you have so few family collectives?' There are a number of reasons. A successful combination of people in a family is needed. Farmsteads hardly have native peasants and young people are reluctant to leave the city, perhaps on account of housing. They will not cultivate much land or take a great deal of livestock. Basically, we have large farms-for 400 cows and more. What family will take them? A total of 80 to 100 small farms, where it is possible to organize a family contract, still remain in the republic. In Estonia 284 families work on the basis of a contract and most of them keep cattle. The family contract does not find acceptance in our plant growing.

"Farm managers reluctantly conclude contract agreements," Baalandi developed his thought, "because it is difficult to fullfill obligations to families in connection with the provision of feed for livestock. And then it is stated correctly: If production has been set up, it makes no sense to break it up. We don't have unprofitable farms. True, some are on the verge of unprofitableness. Perhaps the leasing contract, which has also been discussed with hope here, will give something."

V. M. Kostenko, chief economist of the Druzhba Kolkhoz in Vinnitsa Oblast, seemingly, prepared an answer for Baalandi: "We experienced that state when the farm had already been set up. Growth stopped and something had to be done. We tried different things and reached the following conclusion: A shop structure with small labor collectives was needed. We established 11 mechanized brigades, assigned land to them, and put crop rotation in order with the help of scientists. And in 2 years we raised labor productivity by 34 percent as compared with the previous five-year plan."

However, people can ask: What has this to do with the family contract? It turned out that it was also needed on a highly profitable farm. "We encountered psychological incompatibility in contract brigades," Kostenko said. "This pushed us to family forms. Seven families took 1,300 head under their guardianship. We are just beginning to introduce the family contract in plant growing. At the same time, we don't tear it away from the mechanized brigade and family output goes into the general brigade plan. The results are not bad: Output worth 50,000 rubles per machine operator was produced. The need for equipment was reduced. There were 104 tractors and we left 92. We are preparing several Kolkhidas and Kamazes for sale."

As can be seen from Baalandi's speech, in Estonia the conclusion of family contracts is also held back because of difficulties with feed. But an alternative solution of this problem was found on the Silnitskiy Kolkhoz in Polotskiy Rayon, Vitebsk Oblast: The family contract was applied precisely in feed procurement. Natural conditions in the rayon are not better than in the Baltic region: There are swamps and low-lying areas and equipment can by no means be utilized everywhere. Feed procurement was a weak spot there until the idea was conceived to divide all meadows among families and to assign them permanently.

"We give grass seeds (the amelioration detachment sows) and fertilizers. As a result, 4 tons of hay per hectare of unsuitable land are obtained," O. I. Batyuleva, deputy kolkhoz chairman, shared her experience. "We have not had troubles with feed for many years. A family has its own assignment. It takes 2 tons of hay for itself and delivers the rest to the kolkhoz, receiving 25 rubles per ton. If it delivers in excess of the plan, we pay 40 rubles per ton."

It should be noted that the Kolkhoz imeni Silnitskiy obtains millions of rubles of profits, basically from animal husbandry. A total of 620 quintals of meat and 1,674 quintals of milk per 100 hectares of agricultural land are produced here. The kolkhoz changed over to self-financing in 1987. Most likely, it is impossible to accurately calculate what is the contribution of the family contract to these achievements, but there is no doubt that it is quite substantial.

A search for points of application of the family contract is carried out in many places. A. Ya. Bondars, economist at the Rizhskiy RAPO, discussed a form of the contract, which is becoming firmly established in Latvia. Under this form a kolkhoz family undertakes not only to grow, but also to store, for example, carrots. What is the reason? Peasants know how to preserve products better than bases. Moreover, they are more expensive by spring.

Moscow Oblast experiments widely. Here 279 collectives work on the basis of the family contract and 50, on the basis of the small-group contract. They are engaged in various animal husbandry and plant growing sectors. The personal contract is also becoming widespread.

I listen. I rejoice. I think. Of what? Of the fact that our agriculture (and rural owners) were too long in the captivity of instructions, regulations, and so-called recommendations, which, however, were obligatory. All this not so much helped as ruled out the right to an independent approach and independent thought and, as a result, destroyed in the worker [the feeling of being] the Master of land responsible for the result. The fact that today, instead of "reinforced-concrete" instructions, which stipulate everything from the center, for practical workers, creativity, search, and orientation toward local conditions, economic benefit, and favorable social consequences are recommended—this cannot but gladden us.

Follow-Up Commentary

18240053 Moscow SELSKAYA NOV in Russian No 12, Dec 88 p 13

[Article: "Creativity Is Recommended"]

[Text] Problems concerning small-group and family contracts were discussed at the round table, a report on which was published in No 3 of the journal in 1988.

V. A. Chupeyev, chief of an APK department of the USSR State Committee for Labor and Social Problems, in his answer to this publication notes that the family contract differs from the usual forms of labor organization in the great independence in work on the part of family members. They themselves decide such matters as the work and rest regime, including the length of the work day and the granting of days off. In connection with this compensation for work during hours of overtime and weekly rest days for family contract workers is not made. Such an entry is envisaged in the Model Agreement of the Family (Personal) Contract attached to the recommendations for its application approved by the USSR Gosagroprom and the USSR State Committee for Labor and Social Problems (10-11 June 1987) in coordination with the AUCCTU. There is no need to make changes in the labor legislation in effect.

The labor legislation in effect permits the employment of individuals aged 16 and older and, in coordination with the trade-union committee, aged 15 to 16. Consequently, adolescents of this age, with their consent, can be included in family links. They will have the right to a share of the income (wages) due according to production results. The problem of including adolescents in family links, of the procedure and amounts of their wages, and of drawing adolescents under the age of 15 into work within their powers should be solved by the family itself and parents. At the same time, a differentiation of the amounts of earnings of members of the family link can be made by means of labor participation coefficients, as is done, for example, on farms in the Dagestan ASSR, or by some other method. Nor is there a need to change the legislation on this matter.

The problem of establishing a substantiated norm of output and rates (normatives) for wages for family contract workers is very important. In accordance with the wage statute in effect the output norm is worked out on a farm on the basis of specific production conditions (technology and the level of mechanization and provision with feed, fertilizers, and other material and technical resources) and with due regard for the attained level of the crop yield and animal productivity. In our opinion, for family contract collectives it is advisable to establish output norms with due regard for the level of crop yield and livestock productivity attained on advanced farms in a rayon or an oblast.

The forms of wages for family contract workers can be different: according to rates per unit (cost) of output with due regard for its quality and dates of delivery; according to normatives (rates) from the gross income obtained by a contract worker.

The leasing contract, as well as the contract based on "purchase-sale" principles, has become widespread recently. Under these contract forms the collective of a subdivision or a family purchase from a farm the material resources necessary for production (seeds, feed, fertilizers, and so forth) and sell the produced products to it at contract (purchase or accounting) prices. The funds for wages (cost-accounting income) for contract workers are determined through a deduction of material expenditures from the cost of produced products. At the same time, the products produced in excess of those

specified by the contract remain at the disposal of the contract worker. The choice of a specific form of the contract and wages is made by the contract worker jointly with the sovkhoz administration (kolkhoz board).

The journal's article was also examined by the USSR Ministry of Finance. The answer signed by deputy minister V. N. SEMENOV states that wages based on gross income represent the most efficient form and a reliable anti-expenditure mechanism.

It is advisable to pay wages to workers of the contract collective, before the determination of the final result, throughout the year by means of advance payments.

At the same time, taking into consideration that in seasonal production sectors and, especially, in unstable farming zones advance payments can exceed the sum of the obtained gross income, before settling accounts for output, it is necessary to apply advance time-rate payments in the form of collective piece-rate wages per single order, but not higher than the gross income received from this output on a specific farm, on the average, for a number of years.

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Union Kolkhoz Council Election Results Announced

18240094 Moscow SELSKAYA ZHIZN in Russian 17 Mar 89 p 3

[Announcement by A. N. Devin, election commission chairman, and M. Y. Lyalene, election commission secretary: "Announcement of the Election Commission for Elections of USSR People's Deputies from the Union Kolkhoz Council on Results of Elections of USSR People's Deputies from Kolkhozes Unified by the Union Kolkhoz Council"]

[Text] Elections of USSR people's deputies from kolkhozes unified by the Union Kolkhoz Council were held on 13 March 1989. Three hundred participants (78.7 percent) of an expanded Union Kolkhoz Council plenary session took part in the elections.

The following were elected USSR people's deputies from kolkhozes unified by the Union Kolkhoz Council:

Election Results

	Number of Yes Votes	Number of No Votes
Aksenov, Ivan Mikhaylovich, CPSU member, chairman of Kolkhoz imeni Krupskaya, village of Chistyunka, Topchikhinskiy Rayon, Altay Kray	300	-
Babanov, Toktogul Babanovich, CPSU member, chairman of Rossiya Kolkhoz, village of Aman-	300	-
bayevo, Kirovskiy Rayon, KiSSR Baklanov, Viktor Vasilyevich, CPSU member, machine operator of Gigant Kolkhoz, village of Zhdanovka, Magdalinovskiy Rayon, Dnepropetrovsk Oblast, UkSSR	300	-

Election Results

Diceton Results	Number of Yes Votes	Number of No Votes
Bruss, Ayvar Pavlovich, non-party, chief agronomist of Tervete Kolkhoz, Apini Farmstead, Bitskiy Rural Soviet, Dobelskiy Rayon, LaSSR	300	-
Burduzhan, Valeriyan Vasilyevich, CPSU member, chairman of Pogranichnik Kolkhoz, village of Larga, Brichanskiy Rayon, MoSSR	300	-
Varek, Toomas Karlovich, CPSU member, chairman of Viru Kolkhoz, settlement of Khalyala, Rakvereskiy Rayon, ESSR	300	-
Vertebnyy, Ivan Andreyevich, CPSU member, chairman of Kolkhoz imeni Gorkiy, village of Velikiye Krinki, Globinskiy Rayon, Poltava Oblast, UkSSR	300	-
Vershedenko, Anna Mikhaylovna, CPSU member, milkmaid of Ogni Kommunizma Kolkhoz, village of Khristoforovka, Bashtanskiy Rayon, Nikolayev Oblast, UkSSR	300	-
Volodko, Adolf Adolfovich, CPSU member, chairman of Kolkhoz imeni Suvorov, town of Novoselki, Postavskiy Rayon, Vitebsk Oblast, BSSR	300	-
Vorontsov, Anatoliy Yevgenyevich, CPSU member, chairman of Leninets Kolkhoz, village of Glinishchevo, Bryanskiy Rayon, Bryansk Oblast	300	-
Germel, Stanislav Vladimirovich, CPSU member, link leader of intensive labor collective of Kolkhoz imeni Telman, town of Gorodishche, Braginskiy Rayon, Gomel Oblast, BSSR	300	-
Golov, Ivan Alekseyevich, CPSU member, chairman of Gigant Kolkhoz, village of Tishanka, Talovskiy Rayon, Voronezh Oblast	299	1
Gontar, Valentina Alekseyevna, CPSU member, chairman of Shlyakh do komunizmu Kolkhoz, village of Novoukrainka, Chernobayevskiy Rayon, Cherkassy Oblast, UkSSR	290	10
Gordeyeva, Valentina Ivanovna, CPSU member, director of farm contract collective of Peredovik Kolkhoz, town of Kholstovo, Pskovskiy Rayon, Pskov Oblast	300	-
Gruzdov, Ivan Pavlovich, CPSU member, chairman of Order of Labor Red Banner Zarya kommunizma Kolkhoz, settlement of Korenevo, Korenevskiy Rayon, Kursk Oblast	296	4
Guguchiya, Dzhoto Iosifovich, CPSU member, chairman of Kolkhoz imeni K. Marks, village of Kakhati, Zugdidskiy Rayon, GSSR	299	1
Danilenko, Anatoliy Stepanovich, CPSU member, chairman of Order of Lenin Kolkhoz imeni Buznitskiy, city of Mironovka, Kiev Oblast, UkSSR	299	1
Denisenko, Anatoliy Grigoryevich, CPSU member, chairman of Kolkhoz imeni Kalinin, village of Chervonoarmeyskoye, Akimovskiy Rayon, Zaporozhye Oblast, UkSSR	299	1
Dubko, Aleksandr Iosifovich, CPSU member, chairman of Order of Lenin Progress Agro-Industrial Kolkhoz-Combine, settlement of Vertelishki, Grodnenskiy Rayon, Grodno Oblast, BSSR	300	-
Isayeva, Antonina Ivanovna, CPSU member, cow-milking machine operator of Order of October Revolution Kolkhoz imeni Kirov, village of Berezovka, Zolochevskiy Rayon, Kharkov Oblast, UkSSR	300	-
Yotsas, Aloizas Povilovich, CPSU member, chairman of Pirmin Kolkhoz, town of Sutkunay, Shyaulyayskiy Rayon, LiSSR	299	1
Kalandarov, Abdukhakim Ochilovich, CPSU member, chairman of Kolkhoz imeni K. Marks, kishlak of Khakimkul, Pakhtachiyskiy Rayon, Samarkand Oblast, UzSSR	298	2
Kasyanov, Anatoliy Fedorovich, CPSU member, chairman of Kolkhoz imeni Karl Marks, Novoazovskiy Rayon, city of Mariupol, settlement of Primorskoye, Donetsk Oblast, UkSSR	300	-
Kozhakhmetov, Ibraimzhan, CPSU member, chairman of Kolkhoz imeni Kirov, village of Altyuy, Panfilovskiy Rayon, Taldy-Kurgan Oblast, KaSSR	300	-
Korovitskiy, Vladimir Vasilyevich, CPSU member, cow-milking machine operator of Krasnyy poselok Kolkhoz, town of Zheleznyak, Monastyrshchinskiy Rayon, Smolensk Oblast	299	1
Krivorotov, Vladimir Ivanovich, CPSU member, chairman of Order of Lenin Rossiya Kolkhoz, village of Voskhod, Krasnogvardeyskiy Rayon, Crimea Oblast, UKSSR	298	2
Kuzovlev, Anatoliy Tikhonovich, CPSU member, chairman of Kolkhoz imeni Kalinin, Kanevskaya Station, Kanevskiy Rayon, Krasnodar Kray	300	-
Kukhar, Ivan Ivanovich, CPSU member, chairman of Order of Lenin Kolkhoz imeni Vladimir Ilich, city of Moscow	249	51
Lisov, Nikolay Ivanovich, CPSU member, chairman of Krasnaya Zvezda Kolkhoz, village of Panovo, Shatkovskiy Rayon, Gorkiy Oblast	300	•
Lutsik, Ivan Aleksandrovich, CPSU member, chairman of Iskra Lenina Kolkhoz, village of Tes, Minusinskiy Rayon, Krasnoyarsk Kray	300	-
Makhmudov, Ubaydillo Nurmakhmadovich, CPSU member, cotton growing brigade leader of Moskva Kolkhoz, village of Khorkash, Romitanskiy Rayon, Bukhara Oblast, UzSSR	300	-

Election Results

	Number of Yes Votes	Number of No Votes
Motornyy, Dmitriy Konstantinovich, CPSU member, chairman of Order of Lenin Kolkhoz imeni Kirov, village of Chernobayevka, Belozerskiy Rayon, Kherson Oblast, UkSSR	298	2
Mukhametzyanov, Mukharam Timergaliyevich, CPSU member, chairman of Iskra Kolkhoz, town of Novyye Tinchali, Buinskiy Rayon, Tatar ASSR	299	1
Nazaryan, Spartion Yegoyevich, CPSU member, chairman of Maralik Agrofirm- Kolkhoz, settlement of Maralik, Aniyskiy Rayon, ArSSR	299	1
Nikishin, Nikolay Petrovich, CPSU member, machine operator of Kolkhoz imeni 50th Anniversary of Ukrainian CP, village of Chuginka, Stanichno- Luganskiy Rayon, Voroshilovgrad Oblast, UkSSR	300	-
Novikov, Yevgeniy Fedorovich, CPSU member, chairman of Kolkhoz imeni 50th Anniversary of the USSR, village of Olenye, Dubovskiy Rayon, Volgograd Oblast	300	-
Paplevchenkov, Ivan Mikhaylovich, CPSU member, chairman of Order of Lenin Krasnyy putilovets Kolkhoz, city of Kashin, Kalinin Oblast	299	1
Patsalyuk, Mikhail Prokofyevich, CPSU member, chairman of Druzhba Kolkhoz, village of Brusnitsa, Kitsmanskiy Rayon, Chernovtsy Oblast, UkSSR	300	-
Pilipets, Ivan Nikolayevich, CPSU member, chairman of Pravda Kolkhoz, village of Atyusha, Koropskiy Rayon, Chernigov Oblast, UkSSR	300	-
Plyutinskiy, Vladimir Antonovich, CPSU member, chairman of Order of Labor Red Banner Zarya kommunizma Kolkhoz of Zarya Agrofirm, village of Zorya, Rovenskiy Rayon, Rovno Oblast, UkSSR	300	•
Podolyanina, Yelena Ivanovna, CPSU member, chairman of Order of Honor Emblem Mir Kolkhoz, village of Murafa, Shargorodskiy Rayon, Vinnitsa Oblast, UkSSR	297	3
Reznik, Aleksandr Ivanovich, CPSU member, chairman of Mir Kolkhoz, village of Chervonoye, Gayvoronskiy Rayon, Kirovograd Oblast, UkSSR	299	1
Rekus, Viktor Maksimovich, CPSU member, chairman of Pamyat Kirova Kolkhoz, Kirovskaya Station, Kagalnitskiy Rayon, Rostov Oblast	299	1
Savkov, Vladimir Aleksandrovich, CPSU member, chief agronomist of Ukraina Kolkhoz, village of Makov, Dunayevetskiy Rayon, Khmelnik Oblast, UkSSR	300	-
Salimov, Alibala Khanakhmed ogly, CPSU member, chairman of Kolkhoz imeni N. Narimanov, village of Mursagullu, Neftechalinskiy Rayon, AzSSR	295	5
Safarov, Ilkhom, CPSU member, chairman of Order of Honor Emblem Kolkhoz imeni Lenin, Settlement No 2, Kumsangirskiy Rayon, Khatlonsk Oblast, TaSSR	299	1
Svid, Georgiy Semenovich, CPSU member, chairman of Avangard Kolkhoz, city of Ryazan	298	2
Skakun, Galina Fedorovna, non-party, cow-milking machine operator of Belarus Kolkhoz, town of Borisy, Brestskiy Rayon, Brest Oblast, BSSR	299	1
Skiba, Ivan Ivanovich, CPSU member, chief of Agrarian Department, CPSU Central Committee, city of Moscow	266	34
Sopyyev, Muratberdy, CPSU member, chairman of Order of Lenin Sovet Turkmenistany Kolkhoz, village of Gyami, Ashkhabadskiy Rayon, TuSSR	300	-
Spiridonov, Mikhail Vasilyevich, CPSU member, chairman of Kolkhoz imeni 22d Party Congress, city of Orel	299	1
Starodubtsev, Vasiliy Aleksandrovich, CPSU member, chairman of Order of Labor Red Banner Pedigreed Stock Farm-Kolkhoz imeni Lenin, city of Sokolniki, Novomoskovskiy Rayon, Tula Oblast	294	6
Fazletdinov, Mukmin Galyaitdinovich, CPSU member, chairman of Put Lenina Kolkhoz, village of Mikhaylovka, Abzelilovskiy Rayon, Bashkir ASSR	297	3
Chernyshova, Lyubov Petrovna, CPSU member, machine operator of Kolkhoz imeni Karl Marks, Rasshevatskaya Station, Novoaleksandrovskiy Rayon, Stavropol Kray	300	-
Shchepanovskiy, Adam Mikhaylovich, CPSU member, chairman of Agrofirm of Prapor Lenina Kolkhoz, village of Volkovtsy, Borshchevskiy Rayon, Ternopol Oblast, UkSSR	300	-
Ergashev, Bakhromzhon Makhmudovich, CPSU member, chairman of Kolkhoz imeni Engels, village of Kaltatoy, Leningradskiy Rayon, Fergana Oblast, UzSSR	300	-
Yulin, Boris Yegorovich, CPSU member, chairman of Kolkhoz imeni Kalyagin, village of N. Sarbay, Kinelskiy Rayon, Kuybyshev Oblast	299	1
Yazdurdiyeva, Rozbibi, CPSU member, cotton growing brigade leader of Kolkhoz imeni A. Turayev, Termezskiy Rayon, Surkhandarya Oblast, UzSSR	298	2

VASKhNIL Academician Suggests Ways to Motivate Farmers Better

18240087 Moscow SELSKAYA ZHIZN in Russian 12 Mar 89 p 2

[Interview with VASKhNIL Academician Nikolay Vasilyevich Krasnoshchekov by Irina Konovalova: "Peasant Interest"; first two paragraphs are source introduction]

[Text] What we are expecting from the CPSU Central Committee Plenum.

The fate of perestroyka in the village depends on how much consideration society gives it, Academician N. V. Krasnoshchekov of VASKhNIL [All- Union Academy of Agricultural Sciences imeni V. I. Lenin], believes.

[Konovalova] Nikolay Vasilyevich, in getting ready for our talk, I took a look at a philosophical dictionary, where it is said that the basis for the forming of personality is the social-production activity of people. But judging by the fact that intellectual, creative, and vigorous forces have been washing out of the village in the past decade, the organization of social-production activity is such that not only does it not promote the development of personality but, on the contrary, it affects it destructively.

[Krasnoshchekov] Not only in agriculture—in any sphere of activity if we ignore personality, we do not create intellectual man. Or, as Lenin said, a civilized cooperator. In my notion, a civilized worker is first of all professional. Because only through the job, through creativity, is man linked to the surrounding life. If you are fulfilled in any work, you get satisfaction from it, you are in harmony with yourself and with the outer world.

The American farmer captivates me, the fact that he is professional and comprehensively developed, and that these qualities allow him to go to work, through the economy, for a good living return. But it is necessary to show accurately that the personality-forming process is long and difficult. And the economic factors that eggs the person on to the discovery of his potential possibilities does not play the lowest role here. An intensive economic selection process goes on here and, as a result, many wind up being discarded from the economic sphere. In a democratic society, democracy allows one type of cruelty in its ideas—economic collapse.

[Konovalova] But we have always been proud that our man is reliably protected from collapses and crises, from the "orgy of the economic element"! A kolkhoz, for example, owes the state 15 million and is ruined, without anything left, but the kolkhoz workers' earnings do not drop, social, cultural and domestic-amenity facilities are built, personal homesteads prosper, and income grows. The era of economic accountability has caught many

unawares. Just the first economic accountability elements are mastered, yet people already are coming up short and are deprived of regular standing and firm payment, and whole collectives are proving to be bankrupt.

[Krasnoshchekov] The economics are correct. Whether we run the farm wisely or prefer to rely on "guesswork"—the time has come to draw the line. But it turns out that the threat of economic disaster nevertheless will help to form the worker's personality. Bankruptcy operates within a system of selection of the elements of society that are creative and have initiative. Here the chief does not select the worker—the bank selects. The criteria are businesslike qualities. For the bank gives credit and, in doing so, takes on itself responsibility for the results, whatever they may be. If the farmer goes broke, the bank bears the loss. Which is why there is stiff competition for the right to work the land.

Unfortunately, our process of selection has traditionally acted in a directly opposite direction: the one who has remained on the land is the one who could not hold his ground in the city, or enter an institute or a tekhnikum. And the turning point still has not arrived—as before, each and every one has the right to work the land, which, in my opinion, is impermissibly wasteful. Yes, some influx of young healthy people into the village has appeared, and basically these are resettled people first-generation city dwellers. But let's evaluate realistically: these are enthusiasts, self-taught, and the overwhelming majority of them are not professionals of any kind. And, what is more, where they are newly appointed lessees, cooperators, or members of contracting elements, can they be taught to farm? In the U.S., before a person is entrusted with land, he graduates from an agricultural school. Formally, we also have a system of agricultural vocational and technical education. But, in the extreme case, it imparts primary production habits, it does not educate one in crop management. The notorious economic study at kolkhozes and sovkhozes is extremely inefficient. And, finally, it is actually naive to expect that a harmoniously developed personality will appear "in the process of social-production activity" as long as this process itself remains unchanged. The prevailing agricultural production structure does not develop the source of creativity but suppresses it.

For example, the mechanistic principle, according to which production subunits are formed: there are so many workers and above them a chief, upon whom, in essence, the whole matter depends. The personality of the doer has been blurred, it has not been manifested. Farmers also are united into primary cooperatives, but the personality of each is realized to the extent that an economic right, in the final analysis, is left for each one.

[Konovalova] Today scientists are seeking new ways for rebuilding the rural economy, for controlling it. The form of organization of agricultural production proposed by the new Siberians—intensive-labor collectives

(KIT's)—are widely known. You, Nikolay Vasilyevich, it can be said, are the father of the KIT's. Is your offspring capable not only of improving production indicators but also of providing for the development and improvement of the person himself?

[Krasnoshchekov] I am sure of that. Indeed, before, it was like this: they thought out the scheme at the top and tried to extend it from the scientists' offices to the land. But no, it does not happen, the sort of "paper" scheme was not coordinated with a live person, the peasant. But if we want to have output, let us consider the producer—how he can live more comfortably and work more effectively. This is natural and wise. Abroad, psychological factors are studied thoroughly and skillfully brought into operation. Our expression, "the human factor," came into use only some years later, and it still is understood by many in an oversimplified fashion, if not primitively.

Our new model of organizing agricultural production comes from the person, it is based on the human factor. And at its center is the person.

What does he need so that he may worker better? It is somewhat unexpected, but material stimuli occupies at least an important place among the psychological components of the human factor, but it still is not the chief place. Roughly speaking, the peasant wants to earn more, of course. But even more strongly he wants to stop being shouted at, being ordered about, like a pawn, his human dignity being degraded; to stop being compelled to do senseless work; to stop having to fatten up young steers in the tundra, to carry out someone's whim to grow wheat on alkali soil, to plow up a ripened harvest in order to conceal someone else's bungling....Obviously, there is a subject for deep thought here. But the fact that we come up against is still a fact: the factor of "independence of the worker's action" has emerged in first place in level of significance.

Like this: we have become accustomed to consider that the main thing is to find a chief who is smartest of all, thinks everything over, decides, and is responsible. And only now has the obvious been understood: we have thus turned the peasant into just a robot, turning off the person's main creative mechanism. It turns out that a man reveals his potential possibilities if a boss does not stand over him day and night, does not watch, does not correct, does not prompt. Independence—this is the heart of the human factor. I subdivide it into five components: SELF-thinking or SELF-judging, SELFinterest, SELF-financing, SELF-control and SELF-creating. A person should be a thinker. When there is no driving, when responsibility is not shifted to someone, it becomes necessary to think, to get to the heart of the matter, to recognize a need, to read, to follow up on innovations, to expand one's horizon, to create.

In other words, preferring independence to material stimuli, the peasant apparently has announced his choice: he wants to earn a lot but the main thing is he wants to work normally, as a proprietor, to be a personality.

Further, a factor that has been called "optimization of composition" is very important. When people work en masse, in a crowd, and they are under some manager or chief, it is difficult for personality to manifest itself. In order to enable independent actions, the personnel composition of a subunit must be optimized. It is my opinion that the peasant works best alone, or with the family, not depending upon someone.

[Konovalova] But indeed, is collaboration not characteristic of us? And the requirement, along the way, to temper one's thought, to check the decision adopted? And finally, our customary mutual assistance, mutual rescue and collectivism? Is there really an ideal that a man works better alone?

[Krasnoshchekov] We have a concrete subject of conversation—the peasant's labor. And it is time, finally, to stop applying the high concept of collectivism as a balm for every sore wound. For is it collectivism that five tractors sparkle side by side in one field? In the story, "Sandro from Chegem," Fazil Iskander describes remarkably the peasant's work, the contact with the earth, with nature, as deeply intimate, an identity process, comparable perhaps with love. We have for long decades destroyed this intimacy, have broken down and coerced the delicate creative process—and what have we achieved?

But also from the point of view of the intellect and of becoming aware of personal responsibility for the job, it is basically better for the peasant to work himself. The more so since our model considers a very important factor—the "multifaceted nature of actions." The plowman himself, the agronomist himself, the economist himself—these are professions and developed comprehensively. But machinery, technology, supply and marketing are such that—both abroad and even more so with us—for a very long time they have not been enabled to work independently and, simultaneously, effectively. It is necessary to cooperate. That is why we, in developing a model, went to work on the basis of collectives, but the collectives are small, taking into account the fact that personality here means contrast.

[Konovalova] It is known that the designation itself "collective of intensive work" has caused vigorous debates, especially in regard to the definition of "intensive." But the ringing word "KIT" has survived. It is clear that the trouble is not the name and, what is more, the dispute has not been philological. But if it is proclaimed that intensiveness is the main characteristic of peasant work, then what kind of a harmoniously developed personality can be dreamed of? The machine and the mechanical person work most intensely of all.

[Krasnoshchekov] To be honest, we did not expect that there would be so many claims to the name and, what is more, primarily the content worried us. But in so doing, we, of course, had in mind a definite intensification of the industrial process in comparison with what we have on a large scale today. For what is called, with much heat, selfless, heroic, valorous labor in actual fact often proves to be ordinary production idleness. When they begin to master economic accountability at kolkhozes and sovkhozes, instead of distress because of chronic shortages of personnel and of personnel being overworked, suddenly a reduction of 50-100 people is made. To replace the epoch of idleness comes the epoch of work—not superintensive but normal peasant work.

Over the decades the rural worker, little by little, has become estranged from the land. It was not easy to wean him, but he was weaned and he became an 8-to-5 worker. The main thing is, the day is done, and whether the field remains not fully plowed and the cattle are hungry—that's someone else's worry. He has served his eight hours in production, and regardless of whether he succeeded in doing something or did nothing at all there, you draw him up an earnings schedule and you pay him....And as if all this were in harmony with a prospering of the country. No, we both work less than many and we live poorly. Our work week averages 39 hours, while in the U.S., for example, it is 48, in Japan 52. Incidentally, the life expectancy there is almost 12 years higher than ours.

We have forgotten that the village traditionally did not set a standard for a workday, but the work season. In the winter one indulged oneself, but in the busy season everyone worked 20 hours per day. Meanwhile, cyclicity is characteristic of the work of a professional, a skilled craftsman, be he a tailor, a smith, a theater director, a writer....If at work a moment of creativity is present, work does not stop with the bell.

And finally, the experience, though still modest, of lessees, cooperators and KIT workers—those who organize the production process themselves—indicates that they are just less tired and busy themselves with affairs more quickly, since they have been saved from the confusion usual in agriculture. It is another matter that they often have no place to spend their spare time, no place to engage in sports, nothing to read, no place to amuse themselves.

It is complicated to implement the principle of pay according to the work done, but on the whole it is a feasible matter. Farmers, KIT workers and cooperators earn quite well. But it is much more difficult to bring the measure for work and consumption into correspondence, since in and of itself our money means hardly anything. But if a person gives all he has, as they say, to production work, obviously he should, as a minimum,

recover his strength, eat well and have full-fledged recreation—otherwise he simply will not last for a long time. And, what is more, the principle of distribution according to work is computed on the basis of activating the human factor.

[Konovalova] Unfortunately, often this is just a bare principle, while in actuality much depends on the case. Not long ago I managed to get acquainted with intensive-labor collectives at the Kolkhoz imeni Lenin of Zdvinskiy Rayon, Novosibirsk Oblast. They were working enthusiastically and their indicators were high. But how do they live? There is a wretched clubhouse, a pathetic library, empty store counters, the mud is knee deep in the streets, and the houses...then again one must not seriously call these gray cement blocks houses. The supervisor of one of the KIT's, Mikhail Smerdov, is cooped up with his family in an makeshift apartment, and other housing is not in sight.

[Krasnoshchekov] I am acquainted with Smerdov—an intelligent, aggressive, creative person. Such persons are in the absolute majority of those who today boldly go to leaseholdings, KIT's and cooperatives, who introduce economic accountability, assert the right to independence, and accept responsibility for the fate of tomorrow's village. If you like, they are the elite of the modern peasantry, the best, the advanced part of it, its creative potential. And the results of perestroyka in the countryside depend to a definite extent on how this potential is being realized and how the economic reforms and social transformations are coordinated with the needs and demands of the peasants themselves, with their natural desire to live and work normally. In the final analysis, on how much success is attained in invigorating the human factor.

Moldavian Economist Calls on Gorbachev To Defend Leasing Program

18240163 Kishinev SELSKOYE KHOZYAYSTVO MOLDAVII in Russian No 1, Jan 89 pp 4-6

[Article under the "Leasing" rubric by K. Taushanzhi, chief, Economics Laboratory, MoldNIIOZiPU, candidate of economic sciences: "Let's Create Committes in Defense of Leaseholders as an Opposition to the Apparatus!"]

[Text] Can leasing be introduced if prices are sent down from above?...We need to take into account the level of demand for land plots....Half of the products should be sold on the free market....What are the roots of pilfering?

One of the reasons for the economic lag in the country's national economy and its sub-critical condition is the lack of genuine theoretical developments. It is not by chance that economic science has recently been subjected to criticism on more than one occasion in the literature and in the press. And we cannot help agreeing with this.

From the rostrum of the 27th CPSU Congress the demand was sounded, perhaps for the first time, that we ensure the internal self-development of enterprises. But self-development can be ensured only by new production relations and, above all, by leasing.

In order to understand the nature of the self-development of production systems, we need to have a theoretical conception of it. Research on this problem was engaged in by thinkers prior to K. Marx. Thus, the French expression "laissez faire," which in translation means to remove restrictions or to let things happen as they happen, had become popular in Europe as far back as the 18th century.

To grant freedom of production activity.... These words have been treated in different ways. Only the Britisher Adam Smith developed this principle to its logical conclusion. His book "The Wealth of Nations" was published in 1776. He considered that if the economic activity of each person leads to the benefit of the society, then it was clear that this activity does not need to be confined by anything; in other words, any restrictions should be removed. For the first time Smith revealed the essence of the law of value. He saw how the "invisible hand" was operating. As he expressed it, the "invisible hand" is the natural, elemental action of objective economic laws. These laws operate in addition to people's will and frequently against their will. While critical of certain shortcomings, K. Marx at the same time thought highly of Adam Smith and often was guided by him.

In our country voluntarism in economics began to flourish during the 1930's. Economic laws, even more so, the laws of value and commodity-money relations were generally ignored. Certain production successes were achieved by voluntaristic methods. Nowadays it is clear to everyone that the lower-level economic units should be granted complete production independence. But this challenging call has come into conflict with the old but still-existing management mechanism.

The new economic mechanism proposes, first of all, a price reform: we must eliminate the existing biases of prices on industrial and agricultural items, basing them on socially necessary expenditures and guided therein by the law of commodity-money relations.

The new economic mechanism also proposes planning from below. Planning from below by the enterprises themselves is determined, as a rule, by the level of consumer demand for this or that type of product. In other words, the law of the correspondence between demand and supply enters into force or, at least, should enter into force. And it is on the basis of this law that the price is set, regardless of anybody's will. Until this is the case, the new economic mechanism cannot operate.

In fact, let me pose the following question: Can we introduce leasing contracts in the vegetable-raising farms of Southern Moldavia, when the sales volume is sent

down from above and the prices are set by the voluntaristic method? After all, these prices do not always ensure the conduct of a highly profitable vegetable raising, and for certain farms they are even below the actual expenditures.

Genuine leasing relations can exist, as is known, under the conditions whereby the producer and the consumer themselves determine the price, taking into account the demand for the product involved.

At the present time there are sectors or types of products on which leasing contracts are allowed to be introduced. The question of leasing fees remains disputable. Discussion on this topic is continuing in economic science. It has been proposed that leasing fees being established for land at firm rates per hectare of suitable land plots, taking their fertility into account.

In other cases, it has been proposed that the leasing fee be set as the amount of the difference between the prices at which the farm pays for products purchased from the leaseholders and the prices at which it actually sells them. In the former case, USSR Gosagroprom has stated the following unambiguously: "As a rule, the leasing fee for land and other producer goods is implemented according to firm rates per hectare, taking their fertility into account" (SELSKAYA ZHIZN, 31 August 1988). It may be asked, why take only fertility into account? What about the differences in the locations of the plots with regard to the markets, the transportation routes, etc.? Because, after all, these differences bring about an inequality in the transportation and other costs as calculated per product unit....

To our way of thinking, the level of demand for land plots is important in differentiating leasing fees. Say, for example, the level of demand for land in the Non-Chernozem Zone of Russia can in no way be compared with that of Moldavia, where the population density is so high. The higher the demand, the higher should be the leasing fee. This derives from the law of value, which functions inexorably during a period of commodity-money relations.

And we can hardly agree with the idea that the amount of the leasing fee should be set at the difference between the acquisition price and the sale price. In this case, the output is received from the leaseholders at calculated (contractual) prices. The established, calculated prices are purely subjective by nature.

It seems feasible to us that leasing fees be set by taking demand into account for a five-year period with a breakdown by years, beginning with priviliged prices, but no higher than the production costs over several years. The leaseholder must be provided with a genuine chance to acquire a farm. Those persons who advocate and propagandize for firm prices for products over a five-year period underestimate the variations of the market and in the consumer demand.

An object for study by economic science is composed of the reasons for miscalculations of the brigade contract. One of them consists of the fact that the labor collectives could not fully manifest independence, inasmuch as the enormous bureaucratic pyramid has continued to press down as before. Nor has cost accounting proved to be effective. It is frequently the case that prices, which are set artificially, have not corresponded to the socially necessary outlays. Therefore, the brigade contract, for the most part, turned out to be half-baked. Somewhat later a certain terminology appeared: a "measured-out" independence, a "measured-out" cost accounting.

In summing up and generalizing upon the mistakes of the stage which we have gone through, it may be said that, in order to introduce major new forms of economic management, it is first necessary to create economic prerequisites.

First of all, a leaseholder must have the right to own property. Here it is important to answer the following question: Just what distinguishes captalist ownership of producer goods from socialist ownership? Will this not lead to a capitalist system of economic management? The fundamental difference from the capitalist form of economic management is the fact that land as a producer good under socialism is not an object of buying and selling. The leaseholder in his relation to the land, in contrast to other producer goods, does not have de jure ownership but rather economic ownrship.

The concept of economic property ownership was set forth for the first time by Academician L.I. Abalkin. We suggest that such a concept can also be introduced into the economy of agriculture. For example, the private farmstead plots of kolkhoz members or sovkhoz workers are the property of the state. The possessors of these plots can neither sell them nor buy them, since they are lacking in de jure ownership. Nevertheless, these possessors do have the right of economic ownership. That means that they have the right to produce those products which they consider necessary, taking market demand into account. The products of their labor belong to them. Herein lies the essence or the contents of economic ownership.

The second prerequisite of some significance is granting to the leaseholder the right of free trade. We suggest that the premature determination of channels for selling and for prices without taking into account the market's consumer demand lowers the producer's labor activity. In our opinion, the leaseholder must bring not more than 50 percent of the plan amount to be sold, while he has the right to sell the remaining products on the free market. We suggest that the sale of items on the free market with the use of flexible market prices will solve the problem of shortages on food products. At the same time, the income of the leaseholders themselves will be substantially increased, and this will allow them to invest additional capital of their own in expanding production, mechanizing labor-consuming processes, etc.

And a third condition of no small importance is expanding wholesale trade, granting leaseholders the right, bypassing the sovkhoz and kolkhoz, to acquire from competing industrial enterprises equipment, materials, and stock items. Only a free competition, only a struggle for market sales between industrial enterprises can solve the problem of the quality of agricultural equipment.

When making the transition to leasing relations, economists of the farms and the RAPO's [rayon agro-industrial associations] consider it as their important project to determine the intra-farm estimated prices. Whether these prices will be liked by the leaseholders or not is not their concern; whether they will be liked by the directors is not their concern either. Working out just any prices by the estimating method is nothing but a subjective approach. Because, after all, one must clearly perceive that a lease is not a mass of complex and, at the same time, dead calculations, but rather relations, living relations between two partners. The prices must be such as would express, to an equal extent, the interests of the leaseholder and the director. In other words, this is a mutually advantageous deal. Therefore, even scientifically justified prices developed by the estimate method cannot express mutually advantageous interests. Therefore, they must be only agreed-upon individually for each farm and for each sub-division, depending upon the specific features involved. Still, the economists must study the matter thoroughly and furnish recommended prices for careful consideration by leaseholders and directors, and they must jointly decide whether to lower or raise these prices....

But just how have the economists studied the level of production, and how are they continuing to study it? In order to treat someone and cure him, as is known, you first have to put forth a correct diagnosis. For this purpose, the economists conduct an economic analysis. For example, in dairy-herd raising, with the aid of numerical combinations, they have ascertained that the losses due to low productivity amount to so many rubles, and those arising from the barrenness of cows amount to a different number of rubles. At first glance the reasons for the lag are revealed. After this, they make the transition to the second part—developing measures to uplift the farm's economy. And they proceed to enumerate them point by point: 1. Improve the animal feed base. 2. Fine-tune the breeding process. 3. Lower the costs of producing fodder crops. 4. In the future do not allow the use of purchased animal feeds, etc. There may be 10-20 of these points and sub-points, as many as the imagination will allow. In principle, the more solid, the better. Another year is upon us, and again analogous analyses and measures are being drawn up. But the practical experience of kolkhozes and sovkhozes follows not the measures which have been drawn up but rather their own, unwritten laws.

Let's analyze what these unwritten laws are and who administers them. The atmosphere on a livestock-raising farm is created by "His Highness"—the Livestock

Raiser. The success of the business depends upon him and upon the person who grows the animal feed. Paper measures do not enter into this. Most likely, we should study not the numerical materials but those who bear the interest—the rank-and-file workers. What economic motives are they guided by, and what kinds of interests move them?

The things which we observed on the farms of the Kagulskiy and Vulkaneshtskiy rayons attest to the low level of labor activity among the workers. Many causes have accumulated to bring this about; one of them is low wages. For example, the average wages of a livestockraiser on an unprosperous farm in the Prut region amount to 110-140 rubles. Can a worker provide a viable minimum standard of living for a family with 3-4 children? And what if, moreover, we take into account inflation, which we have have recently come to recognize?

But economic life, just like nature, abhors a vacuum. People seek a solution and find it: they are beginning to pay more attention to their private, auxiliary farms. And they grow vegetables and fruit in order to sell them, as well as to keep poultry and livestock. And how do they maintain these animals if they have no feeds? Request them from the director? But, of course, it is often the case that the farm cannot provide feeds for the publicly raised livestock.

And now we encounter the fact of universal pilfering. For some reason, neither the literature nor the periodical press, except for certain procurators' conclusions, have not seen fit to write that public production has come to encompass the scourge of universal pilfering. Employees on one farm, similar to all the rest, were asked the following question on an anonymous questionnaire: What percentage of the animal feeds disappears "to the left"? Many persons hesitated to answer. After guarantees were made that this particular farm would not be mentioned, everyone answered as follows: 10-15 percent. And they added that they only took things from the farm in order to feed their domestic livestock, whereas they did not know about others. But this seemingly harmless and not even complete percentage amounts to 50,000-60,000 rubles.

Of course, we could call upon people to be more responsible and, in the final analysis, punish the pilferers for theft. An individual instance could be interdicted, but what if the phenomenon assumes a universal nature and becomes a general rule? What then?

I recall an episode which could hardly be called a random instance. I decided to spend the night at the above-mentioned livestock farm, and this is what I saw. In the darkness an ordinary peasant was stuffing a sack full with a green mass of fodder, and he was not

embarrassed by my sudden appearance. I began to reason with him like a teacher, stating that this was bad, that he was stealing from himself.... But in reply he angrily said the following:

"You come here and conduct all kinds of questionnaires; you want to see how much we take, but why don't you ask how much the bosses take? They can write off any products, while we, simple sinners, just about ready for the grave, well now...."

Yes, the peasant was right; the rayon bosses, and not only the rayon bosses, are getting animal feeds from the farm. Here too one can see pilfering. "Privileges for the highranking" is a very mild expression. If we were to be utterly frank, this would be called nothing else but a flouting of social justice. Therefore, the rayon-level and every other kind of chiefs, low-level and not so low-level, are striving in every way possible to preserve their "feeding-trough"—the kolkhozes and sovkhozes—in their previous form. And, of course, under leasing the following well-known words would die out: "Write it off, and my driver will stop by to pick it up." The leaseholder would sell the same thing to this chief but at the market price. It's terrible to imagine: the power and the "feding-trough" are vanishing!

What does it mean to transfer land, equipment, and areas to a leaseholding system? It means, first of all, that administrative power will be taken away. It is a well-known fact that he who owns fixed capital also owns power. And such a person is very loathe to share this power. The feeling of power, the love of power, in essence, is deeply rooted in most leading officials who have traveled a long road in their career. Suddenly at this crossroads there awaits a struggle, a struggle for power, a struggle for perestroyka.

Let's recall the Leninist slogan: The World is for the peoples, the land is for the peasants. As we know the peasants did not get the land; it was taken over by the bureaucratic apparatus. How should the land be returned to the peasants? Only by force. It is naive to assume that anyone would give up any easy chair, and this pertains, above all, to the kolkhoz and sovkhoz apparatus. Here, as it were, a self-reduction is assumed. But this could occur on certain, experimental farms, while a mass-type self-reduction would have to be waited for over a long period of time.

The press has elucidated this issue on more than one accasion. It has been proposed that a special law be passed concerning leasing. It has also been proposed that rayispolkoms be accorded the right to grant lands for leasing. In my opinion, neither a law on leasing nor other administrative measures will exert any influence. There are many fine laws. The local authorities find countermeasures against the effects of every law. What we need is a healthy opposition.

My personal opinion is as follows: We should create a committee to defend leaseholders on every farm. It ought to include, above all, experienced persons who have a good knowledge of their own business, industrious machine operators, livestock raisers, etc. There should be analogous committees in the rayon- and republic-levels, as well as at the Center. In Moscow we need to set up a Supreme Committee To Defend Leaseholders, and it should be headed by M.S. Gorbachev.

Set up from top to bottom, these committees, independent of the Soviet organs, could present a strong opposition to the existing apparatus. For the resisting administrators can still spoil many things for the leaseholders, especially those who want to become masters of the land.

We say that the country is undergoing an onerous period, a period of revolution, a revolution in our affairs. A revolution is impossible without a revolutionary committee, a committee to defend perestroyka in agriculture.

It may be that other forms of struggle are possible; I do not claim to know the whole truth. I have managed to explain one thing for myself: we will continue to buy bread from the capitalist farmers until we create our own leaseholding farmers! On a socialistic basis. This is what the times now demand.

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REGIONAL DEVELOPMENT

Latvian Council of Ministers Chairman on Priority Principles of Food Industry Development 18240119 Moscow SELSKAYA ZHIZN in Russian 27 Mar 89 p 2

[Interview with Latvian SSR Council of Ministers Chairman V.G. Bresis by SELSKAYA ZHIZN Correspondent A. Timkov: "Taking Demand into Account; Latvia's Food Industry Is Being Developed on a Priority Basis"]

[Text] The March CPSU Central Committee Plenum drew the attention of all of the people to the food problem. Manifestation of its acuteness are the numerous lines not for delicacies but for ordinary food products and peoples' dissatisfaction with the low quality of items. At the same time, and this was emphasized at the Plenum, there are huge losses during harvesting, storage and processing during a period of food shortages. Curtailing these losses and perfecting waste-free technology will give us the capability of significantly enriching the menu of the Soviet people. Latvian SSR Council of Ministers Chairman V.G. Bresis, a participant at the CPSU Central Committee Plenum, discusses the work being conducted to improve provision of food products to the population with our correspondent.

[SELSKAYA ZHIZN] Vilnis Gedartovich, I would like to begin our conversation with the exhibitions periodically conducted by republic food processing enterprises. They are not what surprise natives and foreigners alike. We know how to display goods. But the trouble is that the exhibited items are distinguished from everyday product selection as the sky is distinguished from the ground. How do you explain this?

[Bresis] Latvian food industry workers have rich traditions. Our people have not lost their skills. But the opportunities to display them are limited. There are many reasons for this. I will single out the main ones. They do not let us reverse the lack of modern packaging materials. When we get them from abroad and package our product, then it sells like hotcakes.

The roots of this are in the not too distant past. The food issue did not have a leading position in national and republic economies for a long time. In Latvia, the agricultural branch's share, without taking the food processing industry into account, is less than a fifth of national income. Many European countries are way ahead of us in this area.

We are also paying for the prolonged lack of coordination of the integrated production cycle: storage—processing—trade. All of these processes developed in isolation, under the wings of departments with completely divergent economic interests. Integration has now begun but it is going more slowly than we would like.

[SELSKAYA ZHIZN] It seems that even now various elements of our agrarian structure are moving in different directions?

[Bresis] That is true. Of course, we are attempting to guide them in one direction—toward the consumer. But we still do not always succeed in doing this. As an illustration, we have tasked kolkhozes, sovkhozes, and individuals to raise more cattle and economic stimuli are are also at work. But frequently meat processing plants change their formal acceptance schedules during the mass production season. They are lagging behind the farms' capabilities and have trouble adjusting to the growing volume of production. And to blame them for this is not completely correct. Approximately half of their equipment needs to be sent to the scrap heap. The level of automation is approximately 40 percent.

We are not the only ones who know this. M.S. Gorbachev pointed this out during his visit to the republic. A resolution has come out "On Measures for Accelerating the Renewal of the Main Production Fund in the Latvian SSR." But it is being carried out with great difficulty.

Obviously, the USSR State Planning Committee and the State Committee for Science and Technology must think about accelerated design and serial production of equipment for the food branches. New approaches and non-standard decisions are required here and procrastination is intolerable. It hurts all of our interests.

[SELSKAYA ZHIZN] Our strivings toward sufficiency are of course understandable. But the opinion is still widespread that all good things depend not on us but on someone else. Does this stereotype not interfere?

[Bresis] Not so quickly, but nevertheless the type of leader who demands and scrounges for funds gradually assumes an enterprising and businesslike position. The idea of local self-provision of food products that arose a few years ago nudges business managers and party workers into action. The people will judge their work not only through the improvements of regional centers and villages, but also by store counters. If they are empty, the people will lose faith. The time has long since past when one could calmly hold a post and not worry about peoples' opinions.

[SELSKAYA ZHIZN] Economic conditions have become somewhat different...

[Bresis] Yes, many farms are being forced not only to raise and process their products, but also to sell them in order to successfully develop under cost-accounting conditions. Ever greater numbers of goods with kolkhoz, sovkhoz, agro-firm, and agrokominat [agricultural groups of enterprises] trademarks are entering into the republic's food market. There are canned fruits and vegetables, bread baked according to ancient peasant recipes, products of bee-keepers, meat and culinary items, and candy. The [market] share of complicated types of products, requiring expensive machinery to be manufactured, is growing. The "Adazha" agro-firm and the "Padom Latviya" agro-enterprise and kolkhoz are selling potato chips and potato sticks. The Saldus region's "Drun" kolkhoz has become a major supplier of ice cream and it fills orders for almost half of the republic's rural regions.

A significant portion of our kolkhozes and sovkhozes have processing departments and auxiliary processes, their own company stores, cafes, and restaurants. They are located in the republic's capital, and in regional centers and rural villages. Their trade turnover totals hundreds of millions of rubles. It is hard to imagine our food shelves without these varied, frequently original products and goods. If we exhibited them all, the sight would be impressive. But we cannot be satisfied with this.

[SELSKAYA ZHIZN] Prices frequently trouble shoppers. As long as kolkhozes and sovkhozes do not lower them and sometimes also set them too high, this discourages shoppers.

[Bresis] It is true that our farms are still not worthy competitors in the market. But pure management by decree will not lower [prices]. With a greater supply of [goods], prices will fall, too. Kolkhozes, sovkhozes, and agro-firms have not restrained themselves. And I think a well-considered word must be spoken to the major [food] processing enterprises. The agricultural sector does not

have enough resources for its reconstruction and expansion. They will be provided with industry and the collectives have decided to share the profits for renewing food branch enterprises.

Contacts with industry are being sorted out. Kolkhozes, sovkhozes, and processing enterprises are establishing mutually beneficial cooperation with major machine-building factories and are placing orders for equipment and spare parts with them. City dwellers are rendering financial support to the villages. For example, Riga residents allocated 16 million rubles. And a Daugavpils enterprise sent 700,000 rubles for reconstruction of a local meat-processing plant. Workers and engineers from the city of Orge undertook the renewal of farmsteads through their own efforts in order to lease them afterwards to get additional milk, meat and other products.

[SELSKAYA ZHIZN] This is timely aid. But, while visiting processing enterprises and kolkhoz and sovkhoz shops, I often heard that there was not enough equipment and that the equipment was of poor quality. The equipment and lines cannot compare with their foreign counterparts. Would it not be more logical to use these financial injections to purchase the most modern technological equipment abroad and to enter into joint enterprises?

[Bresis] That question, as they say, is right on target. We can build spacious shops, give people excellent working conditions, but we will be marching in place if we do not introduce waste-free technology and do not adjust the output of high-quality goods which are wholesome for peoples' health. They also need correspondingly strict hygienic packaging requirements. It is precisely due to a lack [of standards] that the highly-productive import line at the Riga milk factory is often standing idle.

Serious demands were presented to the machine-builders at the Plenum. Agricultural workers are not satisfied with the quality of equipment and they are tired of reconciling themselves with the lack of much needed equipment which is capable of easing their workload.

The native [machine-building] industry is still not in a state to provide needed equipment to the food branch. That is why we advocate developing contacts with foreign partners. A Yugoslav line was recently installed at the "17th of June" confectionery factory for baking cookies. Once it is turned on, it will double output to the commercial network. The chocolate candy line from the FRG will begin operating this year at the "Laym" factory. Equipment from Italy and the FRG have begun operating at the "Uzvar" and Bauska agro-firm canning factories of the inter-kolkhoz enterprise. Swedish ice cream making equipment is in operation at the Madona region "Aron" agro-firm. Finnish potato processing equipment is being used at the "Adazha" agro-firm.

The Spanish firm "Fiesta" and the "Uzvar" confectionery' factory are establishing joint production for making children's caramel on a stick. Spanish firms will also take part in setting right the production of dried breakfasts, confectionery items, food gelatin, and other products and wares.

[SELSKAYA ZHIZN] Can we hope that in the near future that Latvia's food shelves will be filled with various new products and will get richer?

[Bresis] It is still early to send shoppers to stores for goods. We are only taking the first steps and they are difficult. We have to move in two directions: increase the production rate of milk, meat, vegetables and fruit and simultaneously be concerned about eliminating product loss on the way to the [store] shelves.

The transition to cost-accounting creates good prerequisites for expanding cooperation with foreign enterprises. We link great hopes with republic cost-accounting which will untie the hands of local management agencies, enterprises, and associations and provide broader possibilities for initiatives and enterprise.

Articles by Mari ASSR Agro-Industrial Combine Director M. Zhukov, Explaining Work of New Combine

Mari ASSR Combine Structure

18240147 Moscow PRAVDA in Russian 21 Mar 89 First Edition p 2

[Interview by PRAVDA Correspondent N. Morozov with M. Zhukov, managing director of the Mari ASSR State Agro-industry: "And They Did Not Become Expediters"]

[Text] "We must pay attention to the operating experience of agro-industrial combines, agro-firms, and associations." Thus the question was posed at the March CPSU Central Committee Plenum. Independence, economic management methods, and the progressiveness of cooperative principles must be common under the most diverse forms of management.

The Mari ASSR State Agro-industry was formed a year ago. They established an agro-industrial combine as its basis. M. Zhukov, managing director, talks about its first steps.

[Zhukov] What essentially is the "Mari Variant"? Now there are cooperatives in rural areas for production and processing of output, construction, mechanization and electrification, supply and marketing. Kolkhozes and sovkhozes have entered into them on a voluntary basis. Agro-industrial associations with small management staffs coordinate operations.

There are unions of these cooperatives on the republic level. Fruit and vegetable production and processing, procurement and processing of fur and leather raw materials, and fish were also converted to a cooperative basis.

In a word, the agro-industrial complex is enveloped by [a spirit of] joining into cooperatives both on the vertical (from the republic to farms and leaseholders) and on the horizontal (on the level of farms, a region, and the republic).

Its democratic quality attracts. The will of the workers collectives has decided. A combine soviet and unions of cooperatives, a board of cooperatives and APO [Agroindustrial Organizations] were elected at meetings of representatives. Henceforth, these elective bodies make all decisions on important questions of APK [Agroindustrial Complex] development.

Their practical self-interest was manifested during staff appointments. No one "fired unnecessary people." Instead of 353 people on the State Agro-industry staff, 160 remained on the combine [staff]. Personnel strength of the regional section was reduced by more than half. Approximately 3,000 administrators all told were released during the course of restructuring.

The main thing is that experts functions became different. Today they are the farmer's and livestock-breeder's consultants and assistants. There is interaction with the farms on a contractual, cost accounting basis. A portion of the assets from cost savings goes into the experts' personal accounts. They are not someone's errand boys, not expediters, or agents. And there is less need to provide them with diversions. Now we have to pay to attract an expert. Cooperatives on the regional and republic level also include technological services and production shops. Their responsibility is to introduce progressive technologies.

[Morozov] Has not technological diktat been substituted for administrative diktat here?

[Zhukov] Each cooperative has a vested interest in such diktat. We are really talking about the most progressive achievements of technical thought which are determining the sector's future. No manager will allow a contractor with yesterday's solutions on his farm. Careless work will not do. An anti-cost mechanism and the principle of economic mutual benefit stand in its path. A single remuneration system—[based on] the size of the return (net profit)—has been introduced for all farms, regional agro-industrial associations, sector cooperatives, and the combine's management staff. And [remuneration] for the farmer's partners [comes], not from his own income, but from the profits of kolkhozes and sovkhozes.

[Morozov] Can you give us an example?

[Zhukov] This really is how farm and agricultural cooperative interrelations are being made. At the beginning of the year, the partners determine the volume of work. Proceeding from this, two rates are established: One [rate] per metric centner of output produced (70 percent of the agreed sum is directed at that), and the second [rate] for each 100 rubles of farm income. During the course of a year, the cooperatives cover costs through bank credits. It makes no sense for the contractor to "fleece" the farm or to encroach on its assets. On the contrary, the cooperative is interested in increasing its clients' incomes.

[Morozov] Farms have always had serious disagreements with construction organizations...

[Zhukov] Yes, the latter were succeeding in swindling a great deal of unearned assets under cover of all manner of regulations. Let us say that a contracting organization erected a cow shed for 200 head at one of the sovkhozes. The total cost of the facility was 823,000 rubles. This included overhead expenses—almost 100,000, and other expenses—138,000 rubles. What did this "other" consist of? Temporary buildings and structures, winter increases in construction prices, transport of people, the itinerant nature of work, clearing snow, etc. Builders did not actually incur these costs. There was no need to build temporary structures (the facility was erected on the territory of a working farm). The farm was also billed for winter increases in construction prices even though the facility was erected during the summer.

In this manner, each million rubles worth of construction and installation work is increased by an average of 100,000 "other" rubles. It totals 8-9 million rubles as a whole throughout the republic's agro-industry. This money is considered to be the builders above-plan profits with all of the resulting economic consequences. But the main thing is that these enormous sums fall like a heavy burden on production costs of agricultural products

Such a system of contractor and client relations is unthinkable in the cooperatives. The combine's soviet settles accounts according to prices which do not exceed actual costs. These prices are established by the cooperatives themselves. They force the contractor to lower costs, to increase savings using internal resources, and not at the expense of kolkhozes and sovkhozes at every possible twist. They say that last year experts discovered half a million rubles of unnecessary costs in projects. Incidentally, cooperatives are completely released from centralized distribution of profits (except for deductions in the budget).

[Morozov] How are anti-cost management methods being adapted in kolkhozes and sovkhozes?

[Zhukov] By leasing. Cost accounting, which had been unsuccessfully introduced over many years, was adhered to in orders. We had not expected anything from it.

Lease agreements automatically place production on cost accounting and anti-cost principles. There are over 300 leased subdivisions in the republic. It is being proposed that, henceforth, approximately 40 percent of plowed fields, 48 farm equipment yards, and dozens of farms be placed at the disposal of leaseholders.

[Morozov] Has there been any improvement since restructuring of the republic's APK [Agro-industrial complex] administration?

[Zhukov] Last year, we succeeded in over-fulfilling the profit plan by 36 million rubles. Production profitability reached nearly 35 percent. Meat purchases rose by 11.4 percent, milk by 6.8 percent, and cow productivity rose to 3,277 kilograms of milk. All of this basically permitted financing of all planned measures and a reduction of more than 20 million rubles of bank debt to the state. Unfortunately, six agricultural combine subdivisions finished the year with losses...

[Morozov] Obviously, something in the management system still needs fine-tuning?

[Zhukov] Of course. And not only on the republic level. Take the Goszakaz [State Order] which was discussed in considerable detail at the recent Central Committee Plenum. It must be a constant size for the whole five-year plan. Then an interest in increasing production will appear. We have the exact opposite. The annual growth of meat deliveries to state resources, for example, totals approximately five percent. We are not succeeding in improving local supply.

Or another. Higher level departments are not placing land-reclamation subdivisions at the disposal of agricultural combines although we are certain that if we create cooperatives on the basis of them, matters will improve somewhat. But the agricultural combine as a whole is gaining strength. I am certain that there is a future for this democratic form of management.

New Agricultural Management Structure 18240147 Moscow VESTNIK AGROPROMA in Russian No 16, 14 Apr 89 pp 1-2

[Article by M. Zhukov, managing director of the Mari ASSR State Agro-industry: "Economic Levers in Action: Production of the Mari Agro-industrial Combine Is Being Transitioned to a Cooperative Basis"]

[Text] In order to insure appreciable growth of agricultural product yield, we need to first establish a system of economic relations in the village which will transform the peasant into the real owner of the soil, and will interest him in putting all of his experience, knowledge, and strength into the work.

What a path they have selected for resolving this most important economic problem in the Mari ASSR!

Until 1988, the republic's agro-industrial complex management structure completely corresponded to the structure which had taken shape for the nation's APK [Agro-industrial Complex]—an agro-industrial committee in the center and local RAPO's [Republic Agro-industrial Organizations]. Administrative management methods were the foundation of management bodies. And if during the initial period of operation they provided positive results thanks to the concentration of material, finance, and labor resources, their effectiveness was drastically reduced in the subsequent [period].

It was already impossible to remove production and economic contradictions which arose in relations between kolkhozes [collective farms], sovkhozes [state farms], and industrial, construction, trade, and other servicing enterprises and organizations through bureaucratic management methods. These contradictions slowed growth of production and reduction of agricultural product production costs.

Having analyzed the situation, party, soviet, and agricultural agencies resorted to a radical breakdown of the management structure. On 5 April 1988, the Mari Agroindustrial Combine was formed on a cooperative basis based on the Mari ASSR State Agro-industry. This led to a complete change of the APK management structure.

The New APK Structure

Cooperatives for production and processing of animal and crop husbandry output, construction, mechanization and electrification, supply and marketing have been formed in the regions on the basis of head enterprises. Kolkhozes and sovkhozes have entered into these cooperatives on a strictly voluntary basis.

Unions of cooperatives have also been established on a republic level on the basis of head enterprises: for production and processing of animal husbandry output, cultivation, mechanization and electrification, construction, planning and repair, supply and marketing. In addition, republic narrowly-specialized cooperatives have been formed for production and processing of vegetable and fruit products, procurement and processing of fur and leather raw materials, fish breeding and processing, and for bee-keeping.

In this manner, the agro-industrial complex is encompassed by [a spirit of] joining into cooperatives both vertically (from the republic to farms and leaseholders) and also horizontally (to the farm level and to regional and republic levels between sectors).

With the establishment of a new management structure, the functions of experts who came into the cooperatives from the agro-industrial management staff and RAPO have radically changed. Now the main thrust of their activity is technological management of the sector on a contractual and self-financing basis.

Technological cooperation on the regional and republic levels has its servicing and production shops. Technological services have been assigned the task of developing and introducing new technologies into production, and the shops are specialized for fulfillment of work which is beyond the capacity of local production collectives. This includes parts repair and renewal, processing of animal husbandry output, construction of complex facilities, etc.

They were faced with a clearly defined task for developing, training, and introducing the most complicated technological solutions into production which determine the future of sector development and require the application of labor of highly skilled experts and the concentration of significant resources during the process of formation of cooperatives and their unions.

Thus the union of cultivation cooperatives coordinates activities of agro-chemical, land-reclamation, scientific, seed production, and other services for ensuring agricultural production on the republic level. Scientifically-based intensive technologies for crop cultivation, recommendations for application of organic and mineral fertilizers, and chemical and biological means of plant protection and the struggle with pests are being developed and introduced.

Other unions of cooperatives carry out similar functions. For example, the most complex repair operations are conducted at enterprises of the union of cooperatives for mechanization and electrification. Equipment has been concentrated here and a good material base has been established. Shops are manned by highly skilled experts. A kolkhoz or sovkhoz is not equipped to contain such production and it is also not economically advantageous. In addition, a union of cooperatives carries out orders of APK farms and enterprises for manufacture of various equipment and mechanisms and for their installation and repair.

Just What Are Special Purpose Cooperatives?

These cooperatives carry out special purpose programs. As an illustration, the Uzhga cooperative for processing fur raw materials is involved in dressing and sewing fur products. It is made up of a fur factory and 30 kolkhozes and sovkhozes which raise sheep. After the sheep are slaughtered, the farms send sheepskins to the factory for dressing. Dressed hides are returned to the farms which pay the factory for the sheepskin dressing services.

At the same time, the factory trains experts for kolkhozes and sovkhozes to cut and sew fur items. Its workers organize shops at the farms for sewing fur products and help in technical servicing of equipment.

Cooperation of processors and producers rapidly proved its viability and results. The cooperative produced 800,000 rubles of output during only six months of last year. At the present time, the population is entering cooperatives, shipping sheep hides for dressing through kolkhozes, sovkhozes, or independently. Having reimbursed the cooperative for dressing and sewing services, people obtain finished fur products.

Economic Aspects

In 1988, the combine soviet for all kolkhozes, sovkhozes, agro-industrial regional associations, sector cooperatives, unions of cooperatives and combine management staff adopted a single remuneration and bonus system from profits (net profit). For all agriculture servicing cooperatives and enterprises, not from their own profits, but from the profits of kolkhozes and sovkhozes in the serviced zone. This not only excludes the possibility of overcharging farms or withdrawal of their assets by cooperatives, but it also increases the latters' vested interest in increasing profits of kolkhozes and sovkhozes.

We have also established that the average size of bonuses and additional payments for workers of APO's [Agroindustrial Organizations], cooperatives, unions of cooperatives, and the combine should not exceed a similar reward (in percentages of official salaries) for management workers of kolkhozes and sovkhozes, and that the bonuses of this category of workers cannot exceed the size of the bonuses and additional payments of rank and file animal and crop husbandry workers.

These measures are directed at increasing the vested interests of workers of cooperatives and management agencies in improving production and finance indicators of kolkhozes and sovkhozes.

The soviet has developed and approved a new cooperative cultivation accounting system with kolkhozes and sovkhozes for completed agro-chemical work and it is being introduced locally.

This is the essence of it. At the beginning of the year, completed work volume is determined by a contract as the result of which two estimates are established: one per metric centner of production output in food units (70 percent of the contracted sum is directed at this) and the second estimate, per 100 rubles of profit obtained by the farm (30 percent of the contracted sum is directed at this). Calculations are carried out once on the year's results. During this period, cooperatives cover their costs with Gosbank [State Bank] credits.

Under this accounting system, farms and cooperatives are placed in identical economic conditions, they have an equal vested interest in increasing production output, cost reduction, and attaining a greater total profit.

A statute on economic interrelations of kolkhozes and sovkhozes with cooperatives for mechanization and electrification has been developed and is being introduced. Farms will be billed for mechanization and electrification in accordance with estimates per 1,000 rubles of gross output and will transfer a certain share of total cost savings for agricultural equipment repair and technical servicing, which is estimated in accordance with standards.

The system for kolkhozes and sovkhozes to arrive at mutual estimates [vzaimoraschet] with construction organizations has changed. The APK Soviet, with the participation of all farm managers, decided to limit transfer of kolkhoz and sovkhoz assets to contract organizations in accordance with existing and, unfortunately, by today's standards, parochial departmental regulations and various types of extra charges which number more than 20 and whose share totals 47 percent of the cost of construction and installation work.

The essence of mutual estimates changes with construction cooperatives consists of ending illegal withdrawal of clients' assets.

The combine soviet decided to reimburse construction cooperatives only for planned savings and actual costs in accordance with estimates conforming to existing regulations. The adopted system of mutual estimates forces construction cooperative workers to look for ways of reducing direct costs for construction, to increase their savings using internal resources, and not to fleece kolkhozes and sovkhozes.

At the same time, a stable financial base of cooperatives is being created. It is completely released from centralized profits distributions, except for a 10 percent deduction from it for the budget. The remaining profit totals completely remain at the disposal of the cooperative's management and is allocated by them. A portion is directed at solving regional problems and problems of the cooperatives, the other portion is returned to the farm.

This system, in our view, gives the cooperative a greater opportunity to strengthen its material and technical base, to open new industries, and allows them to independently solve internal cooperative problems, to render assistance to poor farms, and to affect sector development.

Farm cooperation with industrial enterprises is beginning to find practical realization. For example, TETs [Heat and Electric Power Plant] No 1, a confectioners factory, the Yoshkar-Ola Mechanical Plant, and others have concluded contracts with kolkhozes and sovkhozes and are sending funds for farm development, and they in turn are being tasked with calculating output in accordance with contract prices.

This form of cooperation is finding application in the combine when all APK enterprises located in Yoshkar-Ola united and established one subsidiary farm, Agrok-ooperator, and are now beginning construction of buildings for production of 15,000 tons of pork per year.

We Are Developing Lease Terms

Adaptation of anti-cost management methods at kolkhozes and sovkhozes is tied to development of lease terms. The incentive system of 70 percent of the size of total savings and retention of 100 percent of assets which had existed was not effective. It was usually insured only through orders and decisions of judicial organs. The situation is changing under leasing. Production collectives are becoming interested owners of both the means of production and the profits received.

At the beginning of the year, 150 subdivisions in animal husbandry and 168 in crop husbandry were operating on leasing principles. The workers of the Yoshkar-Ola milk combine and fur factory leased their enterprises.

This year, a detailed program for adapting lease contracts was jointly developed by the agro-industrial combine, APO, and unions of cooperatives. We are proposing that sovkhoz workers and kolkhozniks lease more than a third of farm land, quite a few animal husbandry farms, and about 50 equipment yards. Shop workers, who have formed into cooperatives for cultivation, mechanization and electrification, construction, and animal husbandry, are also converting to lease contracts.

Various measures are being used for fulfillment of the planned program. Comprehensive training of experts and leaseholders and trips to other oblasts for study of experience are being organized, and kolkhozes and sovkhozes are providing recommendations and are establishing base farms.

Success in organizing lease terms depends in many ways on leaders. In the republic, we have such confirmed leasing supporters as V.P. Strelnikov, V.V. Remizov, S.S. Rakhmayev, A. Ya. Yegoshin, and others. If there are more such leaders, it means leasing will win. It is not by chance that we see our task in insuring restructuring of economic thinking and the psychology of leaders.

As recent leaseholder training showed, many of them are pursuing the new cause with great hopes. As an illustration, 33 men expressed the desire to organize farms where independence and a feeling of being the boss was a little greater.

We are devoting a great deal of attention to improvement of the remuneration system and heightening its role as an incentive. Last year, a provision was introduced through which awarding bonuses to leaders and experts would be conducted taking into account the elimination of debt assumed by the farm through sale of output to the state. It was established that with a debt in 1986-87 not exceeding 20 percent of planned sales volume for 1988, the permitted lag must be eliminated in one year, with a debt of 30 percent—in two years and, above 30 percent—three years. Bonuses will not be paid when given conditions are not fulfilled.

This provision played a definite role. If by the beginning of last year 26 farms owed 1,100,000 rubles worth of output, now this sum has been reduced to 645,000 [rubles].

Concern About Personal Plots

We are encouraging chairmen and secretaries of Ispolkoms [executive committees] of rural and village soviets to increase the number of livestock in citizens personal plots and being fattened up in accordance with the population's contracts with the farms. Kolkhozes and sovkhozes are allocating funds for this.

In 1988 in comparison with the preceding number of KRS [cattle], the population increased numbers of livestock in two regions, pigs, in 12 regions, sheep, in four [regions] and, goats—in eight regions.

Farms began to sell more young farm animals to people. Last year, 712 more young cattle were sold, 3,285 more piglets, 1,470 fowl, and 712 lambs. As a result, the population's purchases have increased by 142 tons of meat and 1,334 tons of milk. More vegetables, honey, and other agricultural products were purchased.

In spite of last year's poor weather conditions when the republic suffered badly from drought, the number of livestock in personal plots practically did not decrease. The explanation for this must be found in the changed attitudes toward personal farming. But there are still many unresolved problems in this matter.

For example, why can animal husbandry workers not keep their livestock on a kolkhoz or sovkhoz farm, pay the farm for feed and support services, and use the output at their discretion or even sell the excess to the farm?

We think that in small villages where there is no public animal husbandry and the majority of the residents are pensioners, we must create such conditions so that 5-10 cows, 20-50 pigs, 20-30 head of cattle, or 50 sheep could be contained in one yard, with the calculation that people could live freely on the assets gained through production without any additional work in public production.

Raise Farms Which Are Lagging Behind

We envisioned work on increasing savings of farms which are lagging behind. We will devote increased attention to them. Last year, the profitability of such kolkhozes and sovkhozes rose and totaled 32.4 percent.

There are major resources on these farms. For 1988, 64 metric centners of meat (for the republic, 113), and 245 metric centners of milk (for the republic, 363) were produced per 100 hectares of agricultural land on them. If we raise their production to the republic average level, we can produce an additional 6,800 tons of meat and 16,300 tons of milk.

This is why the agricultural combine and unions of cooperatives are striving to render comprehensive practical aid to these kolkhozes and sovkhozes in adapting lease contracts, internal economic estimates, and in organizing economic operations.

Problems and Their Possible Solutions

The transition of the combine to a cooperative basis helps to more speedily resolve many production problems. The main thing, as life shows, is that we need to operate through economic methods.

As an illustration, we made a decision that bonuses will be paid only for that quantity of meat provided by the contract concluded with processing organizations. And already regions and the farms themselves have requested an increase in sales volume of output to the state. Today, meat sales volume has been increased by 1,750 tons and milk by 10,325 tons in accordance with requests of regions and farms against the initially planned figures.

We are devoting a great deal of attention to the problem of improving the work of experts. At the present time, for example, the agro-industrial combine and unions of cooperatives have begun the transition of departments, separate services, workers, and experts to cost recovery and self-financing. What is the essence of this measure? Experts and services are concluding contracts with farms or cooperatives for introducing technological developments. A portion of these funds must at the same time enter into the personal accounts of experts for reducing costs and increasing efficiency. We must also bear in mind savings from [prevention] of livestock loss, cost reductions for repairs, for raising agricultural crops, and also for increasing yield of products from a ton of meat, milk, etc. Specialists will involve themselves in their profession precisely under these conditions.

The problem of our attitude toward economically weak kolkhozes and sovkhozes is no less important. A system of differentiated surcharges of this category of farms gives rise to much unfavorable criticism. However, we consider that, at this stage, it is advisable to preserve this system. The fact is that any enterprise, industrial or agricultural, needs to build at first and can expect a return [on investment] from it only later. If we analyze allocating and putting capital investments to work and compare the availability of fixed assets in the strong and weak kolkhozes and sovkhozes during the course of the last 20-25 years, it is easy to come to the conclusion that strong farms produced more assets and resources over the course of many years than weak ones.

We need to devote greater attention to average and weak farms since they really are capable of increasing agricultural production growth rates. We need to know their needs and problems.

As experience proves, there are still unresolved problems with the Goszakaz [State Order]. We think that the Goszakaz must be given to an agro-industrial combine only for food products delivered to Union and Russian Republic funds. For example, we were given a Goszakaz for sale of 110,000 tons of grain. We sell it for 23-24 rubles per metric centner, and afterwards are forced to buy it at the cooperative price (50 rubles per metric centner) in the southern oblasts. What kind of cost accounting are we talking about here? But we cannot change the existing system.

The Goszakaz must be constant throughout the whole 5-year-plan then it will force the growth of production output. Things are turning out differently now in a number of positions. The annual growth of meat deliveries to state resources totals almost five percent, therefore there is practically no reserve remaining for improving local supply. Interest in increasing production of this type of product is disappearing.

And finally, our APK's production development is being seriously slowed because the land reclamation organization is not becoming a part of it. And we really could also establish real cooperatives on its basis. They could then strive toward our common goal—increase of food production. For now, the land reclamation people are working for the sake of personal benefit.

It is not always possible to resolve the problems listed above within the combine.

Democratization of Management

At the present time, the leaders of the combine, APO, cooperatives, and their unions are being selected by executive boards and meetings of representatives, who in turn were selected during the APK establishment period.

All structural subdivisions were formed on a strictly voluntary basis. Meetings of workers collectives have taken place in kolkhozes and sovkhozes, in industrial enterprises, and in construction and other organizations. Afterwards, the combine soviet, unions of cooperatives, and cooperative and APO boards were selected at meetings of representatives. Now all decisions on major issues of development of the republic's agro-industrial complex are made by these elected organizations. The effectiveness of their activities has already been manifested. Thus, the size of the combine management staff was determined by the meetings of representatives to be 160 people instead of the previous 353 in the republic's state agro-industry. The number of association workers was reduced by 51 percent as compared with the earlier existing sizes of management agencies. A management staff reduction simultaneously occurred in enterprises, organizations, and also in kolkhozes and sovkhozes, on the basis of which cooperatives were also created.

But the main thing is that democratic management methods are now becoming the main activity of all sectors from a leased subdivision to the combine. The cooperative essence of the new structure became the main covering force on the path of voluntary solutions.

How were the republic's APK management structure changes reflected in last year's work results?

They were difficult due to climactic conditions. But even under these conditions, the combine over-fulfilled the profit acquisition plan by 36.5 million rubles. The total profitability of agricultural production reached almost 35 percent. Meat purchases exceeded the previous year's level by 11.4 percent, and milk by 6.8 percent. The average cow milk yield totaled an average of 3,277 kilograms throughout the republic.

All of this basically permitted financing of all planned measures and reduction of Gosbank debt by more than 20 million rubles.

The agro-industrial combine's collective continues to improve its management structure, is striving to raise the economic effectiveness of capital investments, and is attempting to increase production yield of fields and farms.

LAND RECLAMATION, WATER MANAGEMENT

Threat to Environment by Various Projects Decried

Environmental Threat to Volga Region by Industry

18240088 Moscow SELSKAYA ZHIZN in Russian 15 Mar 89 p 1

[Article by V. Rogulin, N. Rozhnov, and Ye. Tsvylev, senior specialists at the Yuzhgiprozem Institute, Rostov Oblast: "Canal—Secretly"]

[Text] Instead of renovating existing irrigation systems, the Minvodkhoz [Ministry of Land Reclamation and Water Resources] plan for the Rostov-Krasnodar Canal, promises new irrigation areas and...the accelerated degradation of Don and Kuban chernozems.

The technical-economic foundation for the first stage of the Rostov-Krasnodar (KRK) Canal was coordinated at all levels hurriedly, without special publicity, which is characteristic of the operations of USSR Minvodkhoz. The client, who is a contractor, is Glavkubanrisstroy [Kuban Main Administration for Construction in the Rice Industry] and the general planner is Soyuzgiprovodkhoz [All-Union State Institute for the Planning of Water Industry Facilities] of the same ministry. The goal, as is clarified now, is to achieve guaranteed production of agricultural products on an intensive basis by means of irrigation. Let us note that this is in the zone with the most fertile chernozems, which are subject to water and wind erosion and for a long period of time have been in need of effective measures to protect and preserve it from erosion.

The length of the first part of the canal is 99 kilometers, including 51 in Rostov Oblast. It is planned to take 3.5 cubic kilometers of water per year from the Don to irrigate 167,000 hectares, of which 17,000 are in the enterprises of Azovskiy and Kagalnitskiy rayons.

How much will all of this cost? It is planned to invest 1.8 billion rubles in the construction of the first stage of the KRK, having spent 10,800 rubles for each hectare that is supplied with water. In the future irrigated area will reach 300,000 hectares; correspondingly investments will exceed 3 billion rubles.

We are convinced that the canal not only does not solve but actually exacerbates the problem of preserving the region's richest soil. Within the boundaries of Rostov Oblast along the main line alone we must remove 7 million cubic meters of fertile soil (it is planned to use it to fill in gullies and sand pits). This will cost 25.7 million rubles.

What does the canal promise? For the building of this first stage alone, 848 fertile Don and Kuban hectares will be irretrievably lost, and in the future this figure will increase many times over. In the large grain regions of Rostov Oblast and Krasnodar Kray where the right-of-way will pass the existing system of organization of kolkhoz and sovkhoz land, intraenterprise land management, crop rotations and roads networks will be violated. We will need a redistribution of land among enterprises, the building of bridges and everything else; as a result the need arises for a new interenterprise and intraenterprise land management. But the main thing is that sooner or later a significant portion of lands unavoidably falls out of agricultural use as a result of the rise of ground waters, salination and other reasons.

But it is not in this that the Minvodkhoz project will give the basic blow "below the belt" to kolkhozes and sovkhozes. In Rostov Oblast there are 425,500 reclaimed hectares, including 395,500 that are irrigated regularly. A large number already today are in need of reclamation. This is where efforts and resources should be directed as a priority! We must improve that which we already have. It is here that we need considerable material and monetary expenditures, but renovation is proceeding extremely slowly since for the water resources department this work is exacting and inconvenient.

What about quality? In 1987 an inventory of reclaimed lands revealed a sad picture—often dependable planning is ignored, in some places a drainage system is absent,

canals are not equipped with hydrotechnical structures and there is practically no accounting of irrigation water. And here Rostov Oblast, having confirmed the results of inventory-taking, petitions RSFSR Sovmin [Council of Ministers] to exclude 65,300 reclaimed hectares from accounts, including 63,500 under regular and estuary irrigation. What an irreparable loss to soil fertility! And how many more hectares are on the verge of being written off?

It is time to answer for the situation existing in the building and operation of such objects. At fault here are not only the operators, but first and foremost the individuals who fought for the endless expansion of irrigated area. Productivity with irrigation is almost double that of dry-farming, as confirmed by TEO [Technical and economic substantiation]. These accounts, disassociated from life, determine the schedule for the return on expenditures. According to the accounts of enterprises the increase in yield on irrigated land in the Chernozem zone does not exceed an average of 30 percent or 100 rubles per hectare. It turns out that the building of the new system will be repaid in 100 years!

In Rostov Oblast in the 3.5 decades of use of irrigated land we still have not approached planned productivity for almost all crops. During the years of the 11th Five-Year Plan net income per hectare of irrigated land comprised 242 rubles in the North Caucasian Economic Region, including 115 rubles in Rostov Oblast and 148 rubles in Stavropol Kray.

The plan for the Rostov-Krasnodar Canal promises to create a zone for the guaranteed production of feed in the southwestern regions. Let us note that this is precisely the grain belt of Rostov Oblast and Krasnodar Kray in which yield of winter wheat on dry farming land reaches 45-50 quintals per hectare. Vegetable cultivation is another matter. Here we cannot do without irrigation. But should we plant such areas in vegetables if almost half of the vegetables cultivated on the available irrigated land do not reach the consumer?

In the Northern Caucasus an urgent problem has developed—to halt the degradation of the chernozem. Science has proven that irrigation worsens the water-physical and chemical properties of this soil and decreases the amount of humus, nutritive substances and calcium in it. Irrigated chernozems are degraded twice as rapidly as dry-farming chernozems. V. A. Kovda, corresponding member of the USSR Academy of Sciences, wrote about this and this is confirmed by salt surveys of irrigated plowland carried out by Yuzhgiprozem [Southern Land Planning Institute].

Another thing also is not new. After 10 years of irrigation the level of ground waters has risen from 1 to 3.6 meters and mineralization has increased to 6.6 grams per liter. Consequently, in the canal zone the river terraces and bottom land will be removed from agricultural rotation and will become salinated and swampy. Already today in

connection with the regulation of the current of small rivers the level of ground waters is rising everywhere. In particular, in grain rayons of the oblast such as Zernogradskiy, Tselinskiy, Yegorlykskiy and Salskiy the water is flooding settlements; many fruit plantings and forest belts have perished. During some years ground waters rise to the surface, taking thousands of hectares out of rotation. Losses to agriculture, the housing fund and enterprises number in the tens of millions of rubles. And how do we measure the moral loss?

The conclusions of specialists from Azovchernomorsk NIIRKh [Scientific Research Institute for the Fishing Industry] convincingly speak of the harm the building of the canal will incur on the fishing industry in the Don basin. Alas, the problem lies not only in the fish. The Volga-Don 2 Canal is supposed to divert water for the Rostov-Krasnodar Canal, and by doing this the TEO promises, "...to improve water quality and the sanitary condition of water reservoirs in the Azov region, to improve the social and everyday living conditions of the local population." But everyone knows that the interests of some departments have already sabotaged the ecological health of the Volga; the river itself needs immediate treatment—its water is very polluted with petroleum, heavy metals and harmful microflora. Don water is no cleaner in the Rostov area, where the divergence of water for the Rostov-Krasnodar Canal is planned. Somehow we do not see the logic in the promises of improved water reservoirs and living conditions of people.

Our proposals are:

- 1. To halt the building of the Volga-Don 2 Canal and the Volga-Chogray canals, which have exacerbated a crisis ecological situation that already existed and to halt the development of the technical plan for the Rostov-Krasnodar Canal.
- 2. To direct the material resources of Minvodkhoz into the renovation of existing irrigated lands, into the implementation of soil conservation and counter-erosion measures, into improving the sanitary condition of small rivers and into the building of intra-enterprise roads, vegetable storage facilities, refrigerators and processing enterprises.

Of course we need reclamation. But it must be intelligent! We need policies that do not suffer the mania of being gigantic and that are carried out for the good of the beneficial land and not to the advantage of the wasteful principle of assimilating a volume of building and installation work.

Volga Region Canal Projects Degrade Environment

18240088 Moscow TRUD in Russian 1 Mar 89 p 4

[Article by I. Beda and O. Podznyakova, Volgograd: "Storm Over the Volga"]

[Text] On 28 February an off-site conference was held in Volgograd by the board of the RSFSR Office of the Public Prosecutor chaired by RSFSR Public Prosecutor S. A. Yemelyanov. The fulfillment of laws concerning the preservation of the environment and the Volga River basin was examined.

About 7 billion cubic meters of polluted sewage, including over 1 billion that is not treated at all, are dumped into the great Russian river and its tributaries. Among the harmful substances are 367 tons of organic impurities, over 45,000 tons of nitrogen compounds and 12,500 tons of petroleum products...The Moscow and Oka rivers are constantly being poisoned by nitrites and nitrates. Dangerous concentrations of these have been found near Gorkiy, Cheboksar, Saratov, Volsk and Volgograd. In the Kuybyshev and Saratov water reservoirs the content of chloro-organic compounds is 10 times greater than allowable norms.

Volgograd enterprises annually dump 227 million cubic meters of municipal and industrial sewage into the river, and the total amount of discharge of harmful substances into the atmosphere in the oblast center comprises over 700,000 tons annually.

The information that was provided in the presence of representatives of the press at the conference of the board of the RSFSR Office of the Public Prosecutor cannot be compared at all to what we knew before. This fact in and of itself, and also because this fact is coming from the highest overseeing organ of the republic, attests to the irreversibility of democratization and glasnost processes and to an increase in the level of ecological consciousness within society. The conviction that in order to fight negative phenomena a broad public must first and foremost be aware of them is becoming more and more indisputable.

However, for many years this seemingly simple truth was caught in the mire of departmental secrets and regional ambitions, which even today continue to hinder the radical restructuring of natural conservation. As a result the ecological situation in Kazan, for example, has been called unfavorable today, in a number of rayons of Kuybyshev Oblast—extremely urgent, in Astrakhan—urgent, and in Krasnoarmeyskiy Rayon of Volgograd—critical. Evidently this is why Volgograd was selected for the local conference of the board of the republic's Office of the Public Prosecutor.

Recently representatives of the public and the press have often been accused of incompetence, of not having a balanced approach and weighty arguments when elucidating ecological subjects. The facts that were heard at the board meeting confirmed that the main problem for water resources in the Volga Basin come from enterprises and organizations of the agro-industrial complex, RSFSR Minzhilkomkhoz [Ministry of Municipal Housing], RSFSR Minrechflot [Ministry of the River Fleet], USSR Minudobreniy [Ministry of Mineral Fertilizer Production], USSR Minlesprom [Ministry of the Timber

Industry], USSR Minkhimprom [Ministry of the Chemical Industry], USSR Minneftekhimprom [Ministry of Petroleum Refining and the Petrochemical Industry] and others.

As noted, control over the objects of various departments on the part of natural conservation organs and local soviets is weak. But if we analyze the facts, doubts arise: Is there any control at all? Is there any logic at all in the fact that everywhere in the cities of the Volga region a strong effort is being put forth to increase industrial capacities without concern for environmental protection in existing capacities, without thinking about even the most elementary—about the fact that the Volga is literally choking on impurities.

Yet over 60 million people drink water from the Volga Basin.

The largest volume of unpurified sewage—about 30 percent—comes from enterprises of the municipal housing industry. But look at what is happening. In the city of Pavlov, Gorkiy Oblast, workers cannot seem to finish the construction of a purification system with a capacity of 40,000 cubic meters per day. The second stage of the Gorkiy Aeration Station has also become a long-term project. Yet at the same time the USSR Ministry of the Chemical Industry has made a decision to build in the oblast the second stage of the Volga Chemical Plant imeni Frunze, which has already become a great polluter of the Volga and the Gorkiy water reservoir.

Since 1961 the building of sewage pumping station number 32 has been in progress in Astrakhan with an estimated cost of 556,000 rubles, yet only 74,000 have been assimilated. Local powers will not obtain satisfaction from dawdlers. At the same time USSR Mingazprom [Ministry of the Gas Industry] is assimilating hundreds of millions of rubles here in record time for the building of the Astrakhan Gas Complex.

Purification systems in Volgograd are overloaded and cannot secure the proper purification of arriving sewage. Someone cleverly situated them in the very heart of the Volga—on the once beautiful summer house island of Golodnyy, which today has become the river's "ecological bomb." USSR Minvodkhoz in record time assimilated over 102 million rubles on the Volga-Don 2 Canal that is in the process of being built. We can provide an entire list of cities in the Volga region where there are no purification systems at all.

At the board meeting there was a discussion of the various components of the ecological program for the Volga region that foresees the priority tasks for the near future. But won't it turn out that this program simply secures the interests and ambitions of those very departments if they are the ones who create the program for themselves?

Without the participation of a broad public this kind of document should not see the light of day.

There were many proposals at the conference about improving the ecological situation in the region. Let us emphasize just one thing—we need a special law about economic activity in the Volga Basin forbidding it in all cases without exception if the great Russian river might suffer even minimal harm.

By the way, departmental ambitions are always justified by high goals. For example, in the opinion of USSR Gosagroprom [State Agroindustrial Committee] the Food Program simply cannot be solved without large orders to USSR Minkhimprom for the building in Volgograd of facilities for the production of bazudin (a pesticide that is especially toxic and harmful to man) and to USSR Mingasprom—for the production of sulfur by the Astrakhan Gas Complex for the production of agricultural fertilizers.

Both threaten the Lower Volga with irreversable consequences. Already today fish are dying there, there is acid rain and the health of the people is suffering. Cases were presented about changes and pathologies in nature and in the human body.

At the same time the materials of the republic's Office of the Public Prosecutor attest to the fact that in the enterprises of Astrakhan, Volgograd, Kirov, Kuybyshev, Orel and Ryazan oblasts and the Mordovian ASSR the availability of facilities for the storage of mineral fertilizers and pesticides comprises from 16 to 50 percent. In the spring of 1988 those same pesticides in short supply, which are stored in the open and which are so needed by the country's gosagroprom, were washed away by rains and waters from melted snow into the rivers of the Volga Basin.

The food program is of national importance, of course. But isn't drinking water a vitally important food product, one with which the cities on the Volga are beginning to have trouble on a routine basis. Don't the fish reserves in the Volga and the Caspian help to solve the food problem? As a point of information, last summer in the lower part of the main water artery of Russia the mass death of valuable fish breeds valued at 34.5 million rubles was noted.

This is why, in our opinion, the clearly defined position of the republic's Office of the Public Prosecutor is so important in principle—the development of irrigated farming, the building of hydroelectric power stations, water reservoirs, canals and other objects is being planned without the necessary concern for the preservation of natural resources, fish reserves and a clean environment, which is intolerable. In developing such projects, as noted at the meeting, the opinion of scientists and public workers is not being taken into account.

As a result of the hydrotechnological building on the Volga absolute losses of agricultural lands already comprise 3.2-4.8 million hectares.

Attitudes toward the building of the Volga-Chogray and Volga-Don 2 canals has become that whetstone on which the responsibility of directors for the decisions that are made is being sharpened today. The USSR Gosplan commission of experts is now working on the ecological appraisal of the plans for both canals. At the same time, the session of the Astrakhan Oblast Soviet of People's Deputies turned to the government with a request—to cease the construction of the Volga-Chogray Canal. But the session of the Volgograd Oblast Soviet on the contrary has appealed to Sovmin to continue the construction of the Volga-Don 2 Canal.

What guarantee do we have that the decisions of the people's deputies are not due to subjective, immediate interests? And who can be trusted regarding the prediction of the consequences of economic operations of all-powerful ministries and departments working on one of the largest rivers in the world? The tie-up has been created by USSR Goskompriroda [State Nature Committeel in structural organizations, and there is no end to it. And the public prosecutor's surveillance, as was self-critically noted at the board meeting, was reduced only to a fixation of already-tolerated violations of natural conservation laws. This is also facilitated by the fact that today's legal norms allow us to bring to responsibility only "the pointsman" (even if he is in the ranks of general director) and not those who placed him into this situation, who allowed the plant to begin operating without a purification system.

For example, the public prosecutor of the Main Investigative Administration of the USSR Office of the Public Prosecutor initiated a criminal case dealing with the dumping of harmful industrial wastes and air pollution, tolerated by responsible parties of the Astrakhan Gas Processing Plant. But the defendants used as their defense the fact that the first stage of the plant was put into operation by USSR Mingazprom according to a temporary scheme, without a whole series of natural-conservation structures and with incomplete construction. Thus it was simply impossible for the enterprise, they said, to achieve accident-free operations.

The consequences continue—accidental dumping is continuing. On 19 December of last year extremely high levels of hydrogen sulfide were registered in the settlements of Molodezhnyy and Narimanovo, where a survey by SES workers of 1,100 persons revealed the typical characteristics of poisoning and loss of ability to work. And once again now the oblast office of the public prosecutor has started criminal proceedings, the second. But in USSR Mingazprom there is no thought at all to stopping production and USSR Minyugstroy [Ministry for Southern Construction] has not corrected its incomplete work and is increasing the pace of building in the second stage of the plant.

No better is the fate of another "loud" matter in the Volga region that roused the Volgograd public prosecutor to the fact that the directives of the senior sanitation doctor and deputy senior state sanitation doctor of the RSFSR were not fulfilled concerning halting the operation of Shop Number 6, where caustic soda and chloride are produced using the mercury method (Kaustik Association). Over half a year has passed since the resolutions were announced; mercury has been found in the clinic, the square, on city transport and most frightening—in the bodies of 42 Volgograd residents, yet the shop continues to use the poison, which has already found its way into Sarpa Lake, a preserve.

The oblast office of the public prosecutor has made a presentation to the USSR Minister of the Chemical Industry in which it insisted on the immediate fulfillment of the decisions of the organs of the State Sanitation Investigating Agency. But alas, the public prosecutors are not listened to.

There is only one conclusion: It has already become clear that the director of the enterprise, even one under investigation, will not stop production without an order from above. And so far not a single minister has been made to answer for violations in the law on natural conservation. Not a single one.

And this says a lot.

FORESTRY, TIMBER

State Forestry Committee Chairman on Industry Goals

18240134 Moscow LESNAYA PROMYSHLENNOST in Russian 30 Mar 89 pp 1-2

[Interview with academician Aleksandr Sergeevich Isaev, chairman of USSR Goskomles, by correspondents V. Markov and A. Oleynikov: "Give the Forest its Due"]

[Text]

[Correspondents] Aleksandr Sergeevich, speaking a year ago at the All-Union conference on problems in forest use, as chairman of USSR Goskomles you pointed out quite a broad circle of tasks which forestry must solve during perestroyka.

[A. S. Isaev] I foresee the question: What have been the successes in the past year? Above all, we were faced with setting up a new structure for the sector staff. We organized functional units which would be responsible for specific directions in forestry affairs. These are, first, reforestation, where there are many problems. The second direction, which we think is very important, is economics. The task is to pattern the existing forestry system into a new economic management mechanism

specified by perestroyka: the conversion to cost accounting, the introduction of forms such as lease and cooperatives. We had to become completely involved in working on a normative base and questions in financing forestry operations.

Serious attention was given to important directions such as forest use and state monitoring of forest condition and timber stand use.

The committee's structure is, for the most part, complete. Eminent specialists and scientists, almost all having experience in organizational work, are at the head of each direction.

[Correspondents] The CPSU Central Committee and USSR Council of Ministers' decree on improvements in managing the forest complex stressed the leading role of economic forms and methods for managing forestry. Starting this year, enterprises in the sector began the conversion to cost accounting. The editorial board receives many letters from all over the country. These make it obvious that this is encountering great difficulties.

[A. S. Isaev] The biggest delaying factor is that up until now there was no firm legal basis upon which we could base perestroyka in forestry. The decree foresaw, for example, the compilation of important documents such as the regulations for state forest control and state forest protection, and the regulations for leasing. We were also obligated to prepare materials on the sector's 1989 conversion to cost accounting. All these documents were prepared by the specified deadline last fall; however, they have still not been approved by superior authorities.

The keystone to the conversion of forestry to cost accounting is to define sources of financing. Up until now it has been by the residual principle and has not supported effective forestry operations, especially reforestation and fire protection. Financing was by baseline methods and has evolved differently in various regions. It was by no means scientifically sound.

When we analyzed what forestry needed now to support normal reforestation, fire and other protection, it became clear that we required about 400 million rubles for operating expenses. This, I stress, is for forestry operations. It is easier for industry to convert to cost accounting because it is selling a product—wood. It only has to more rationally use this product.

In forestry operations we do not readily have a final product in the form of a timber stand; it takes many decades for a forest to mature. Therefore we proposed evaluating operations where there is a final result. So far work has been evaluated mainly by the quantity of trees planded. Nobody paid for the final product, for planted trees grown into an area covered with forest or for the creation of valuable timber stands. We suggested a new approach: paying for the transformation of plantings

into an area covered with forest or for the creation of valuable timber stands. This radically changes the evaluation of all reforestation activity.

However, finances are needed to put this into practice. One cannot grow a genuine forest for the 60 rubles which is now allocated in some regions to create a hectare of trees. For this sum one can only create the appearance of work. This is simply throwing money on the ground.

Questions of finance have still not been solved. As I have already stated, our proposal is still being examined and coordinated.

[Correspondents] Aleksandr Sergeyevich, everybody knows that the state is in a difficult financial situation. Where can it find the half billion rubles needed by forestry?

[A. S. Isaev] Essentially, we earn this money. Throughout the world stumpage fees and the tax value of standing timber are viewed as compensation for the socially necessary costs of reforestation and forestry operations. This should go to forestry. This is sufficient money to fully support us. Also, as suggested, the stumpage fee will be increased by a factor of 1.8, even though this is many times less than in other developed countries.

However, Minfin [Ministry of Finance] says no, this money will go to the budget or, if worse comes to worse, to finance unprofitable forest industry enterprises.

There is another question which we cannot solve without losses to forestry. The conversion to the new system of economic management presumes an increase in wages. How will this be paid? Either through increased profits or through reductions in the number of workers. A huge group of workers, forest protection workers, creates no direct profits. As we obtain no state subsidies, we have to reduce staff. We are thus literally releasing, first of all, our taiga spaces. We are losing control of huge forest areas, as reductions involve foresters, silivcultural engineers, i.e., people who are directly engaged in growing and protecting forests.

We assume that the economic management mechanism which we have developed and which is still being examined at USSR Gosplan will support the conversion to a new system of financing and to cost accounting, helping the sector effectively do forestry. This mechanism is now being applied at almost 200 of our enterprises.

[Correspondents] There is the quite widespread opinion, including among economists, that forestry can develop through profits from the use of timber and other valuable goods from the forests.

[A. S. Isaev] This approach is fundamentally incorrect. As soon as it begins to predominate, then there will be emphasis on a strictly utilitarian attitude towards forests. This is an economic management psychology. The drive for very short term benefits leads to neglect of long term goals in forestry. There are many examples of this in our forestry practice.

I think that it is the state's obligation to find resources for forestry, reforestation, fire and other protection. As I have already said, this question can be solved through a stumpage fee. Moreover, we should also keep in mind deteriorating ecological conditions. If we think only about short term advantage, neglecting tomorrow's interests, then we will simply eat up our forest capital and will be responsible to our descendants for this.

[Correspondents] Doesn't it seem to you that we have already done so much that we cannot count on our descendants' gratitude?

[A. S. Isaev] Yes, the forest use problem in the country has become so extremely urgent due to a fatal shortage of wood products. Our best stands of timber are being intensively cut. This is a result of imperfect planning and the desire to obtain more low cost timber from accessible regions. This practice has stayed with us from the 1930's when the principle of sustained forest use was considered anathema because it was not appropriate to the program for the country's accelerated industrialization. It is our misfortune and our fault that timber harvest planning is not based upon the presence of forest resources, but upon available logging capacity. Lespromkhozes are not relocated where there are timber supplies. Practically no new enterprises are being set up in timber surplus regions and there is no equipment for selective cutting and stand improvement cutting.

[Correspondents] This gives rise to overcutting.

[A. S. Isaev] In several countries overcutting the estimated cut is viewed as a state crime. How do we view it? In 20 years about 700 million cubic meters of timber have been cut in the European part of the country. This is five times the estimated cut. Forests have been exhausted in Karelia, in Kirov, Kostroma, Vologda, Perm and Sverdlov Oblasts, along rail lines in Arkhangel Oblast and the Komi ASSR. USSR Minlesprom and USSR Gosplan are demanding that USSR Goskomles again authorize almost 17.4 million cubic meters of coniferous timber overcutting. Minlesprom has been in a difficult situation and needs some time to make the transition to sustained yield use. This requires a government decision to determine these overcuttings and to simultaneously outline specific measures to very rapidly eliminate this abnormal situation and not to endlessly continue basing overcuttings on doubtful, unscientific computations stil used by Gosplan. (To our great sorrow,

as this interview was being prepared for printing, the RSFSR Ministry of Finance, with agreement by oblast ispolkoms, approved this overcutting.—the editorial board).

[Correspondents] What is Goskomles doing to bring order into forest use?

[A. S. Isaev] First of all, we need objective information about the condition of our forests. We set up the "USSR Forest Resources" All-Union Scientific-Research Information Center. After combining this center with the Lesproyekt [Forestry Planning and Design] All-Union Association and the Souzgiproleskhoz [All-Union Forestry Planning and Design] Institute, we will be able to effectively use information and scientific materials to improve forest inventories and monitoring.

The forestry management draft plan should include a maximum amount of forestry, forest biology and economic data. Enterprise efficiency depends upon what kind of a draft plan it has. It should utilize forest resources on a scientific basis. When the forest management draft plan contains commodity-monetary estimates of the forest stock, calculated structurally, monetarily and spatially and is based upon a 5 or 10 year plan, this will make it impossible to bind an enterprise to timber grades not in its stands or to harvest volumes which it cannot handle or which contradict forest use rules.

In short, "Lespoyekt" is part of the system for managing and monitoring forest resources. A data bank is being created for individual enterprises and the entire country. The forest management draft plan will be entered into a computer, making it possible to quickly obtain the necessary information and effectively use it.

Plans are also being made for data banks necessary for evaluating and predicting the ecological situation. We are linking up to the international ecological center for forest resources and thus connecting to the worldwide forest ecology information system.

[Correspondents] Aleksandr Sergeevich, last year there was a discussion of the draft to the regulations on leasing forests in the USSR. The paper's readers are interested in its further fate.

[A. S. Isaev] Last September the draft was refined, taking comments and suggestions into consideration, and was sent to the USSR Council of Ministers. I think that leasing is the keystone to modern forest use. It is meeting resistance, especially by USSR Minlesbumprom. Why? Apparently because under leasing there will have to be a contract to obtain forest stocks and there will have to be payment for forest use. The main reason we do not have enough forest products is that forests are used practically for free. This creates waste. Every third log is lost either at the cutting area, on the road, or during processing. Leasing is to put an end to this wastefulness. It is not

directed towards excessive profits, as some think or create the impression they think, but towards the maximum use of forest resources, skilled, scientifically based economic management in the forest. A real master of the forest has nothing to fear from leasing, as the lessee will only have to pay for various types of shortcomings. If you allow overcutting, then you will have to pay a fine five times the value. If collections of fruit, mushrooms and berries are below the average normative base, then you will have to pay. This will not please some, as they have become used to taking things from the forest or leaving them there without having to account for it.

We hope that when there is a national law on leasing, forest leasing will be a component part.

We now have a huge number of loggers, including so-called self-loggers. Many feel themselves to be temporary dwellers in the forest. Administrative methods cannot put things in order. They must be transformed into lessees, use must be made of economic tools and control by the ruble.

[Correspondents] The editorial board gets letters from comprehensive enterprises. They are not pleasing. The writers report that in the complexes which have been set up the emphasis is towards logging, while forestry needs are given second priority.

[Isaev] Sustained yield is the fundamental characteristic of a comprehensive forest enterprise. The allowable cut should be focused on this. Stand improvement cuttings should be in amounts called for by intelligent forest management, fully using the timber obtained, replanting cut areas with high quality trees, and developing auxiliary uses. These are obligatory components for comprehensive operations. However, according to our data they are mainly cutting timber.

To organize these complexes we transferred about 200 forestry enterprises to USSR Minlesprom. However, loggers demand the transfer of new leskhozes and lespromkhozes, saying that there was a resource scarcity, although on those areas they already obtained the actual cut was 70 million cubic meters below the allowable cut.

In the form in which it is now functioning the forest industry will never be able to supply the country with wood. Its structure, economic management mechanism, equipment, technology policy and personal training program are all oriented towards clear cutting of large areas. However, such large areas are getting scarcer, there are practically none left. It is necessary to change logging strategy and tactics. The Finns "go into the forest" three times; however, they harvest twice as much timber per hectare as we do. Their labor productivity is five-fold higher than ours.

An intermediate forest use mechanism must be created. A huge problem is facing us in the European part of the country. A coniferous story is growing up under the

hardwood canopy. This is the basis for future coniferous forests in this huge territory. We need selective cutting of the hardwood canopy, but do not have the appropriate machinery. Monsters such as the LP-19 cannot get in there.

Forestry operation mechanization is as neglected as it can be. This problem must be solved fundamentally by creating a wheeled tractor with a set of equipment which, among other things, can work in intermediate stands without damaging the soil. We have signed contracts with machinery builders to create such a tractor. This program must be implemented as quickly as possible.

[Correspondents] Where is the money for such equipment?

[A. S. Isaev] In payments for forest resources, in enterprises thoroughly processing low quality timber and in developing auxiliary uses of the forest.

We need this money not only for technical reequipment, but also to develop social infrastructure. There is not a single sector in the country worse off than is forestry in this regard. Judge for yourself: only 40 percent of needed housing is available, only 17 percent of health facilities, 29 percent of children's facilities and 25 percent of pioneer camps. Eighty two rubles are allocated for the social needs of each worker. For comparison look at geologists; their figure is 633, while in the Ministry of the Gas Industry it is 1,840 rubles.

The figures are simply incomparable. It is time to end this long standing injustice.

All these tasks are reflected in the draft to the Concepts for Perestroyka in Forestry up until the year 2005. We face a lot of work but we must complete it.

[Correspondents] The last question. The draft to the general principles for perestroyka in management in the economic and social sphere in the union republics says changes are required in the functions of several all-union agencies, including USSR Goskomles. What is your opinion about this?

[A. S. Isaev] An expansion of sovereign rights to selfmanagement and self-financing will undoubtedly increase union republics' responsibilities for efficient natural resource use. However, it is extremely important to specify the competence of the USSR to dispose of and use natural resources of significance to the entire country. The state forest stock is just such a resource.

USSR Goslesprom must retain the right to manage the forest stock, determine the amount of forest use, taking into account the composition and condition of stands, their ecological role in various regions, state monitoring of forest condition, use, reproduction and protection.

The state should be responsible for the strategic direction of forestry, working out long term concepts, scientific research and training forestry personnel. Also, USSR Goskomles must retain the function of distributing state orders and the planning of general country wide measures to rationally use forests.

All this will not in any way infringe upon the rights of union republics, which are are to directly carry out economic activities in the forest and to manage all production operations in forestry and the social development of enterprises.

It should be stressed that transferring forests to the full disposition of union republics contradicts the Leninist teaching of forests' indivisibility and exclusive general state ownership of them. The manifestation of local egoism with regard to forests is impermissible.

Effect of Flexible Pricing on Forest Industry Described

18240133 Moscow LESNAYA PROMYSHLENNOST in Russian 30 Mar 89 p 2

[Article by I. A. Romanov: "Prices Aquire Flexibility"]

[Text] As is known, existing wholesale prices for forest products do not strengthen cost accounting in the sector and the formation of principles such as cost recovery and self-financing. Even during radical economic reforms, dozens of logging and sawmill enterprises continue to lose money and are maintained by subsidies.

In connection with this the USSR Minlesprom recently published an order "On the Development and Use of Accounting Prices for Forest Products." The new prices are to be introduced on 1 April 1989. Our correspondent met with I. A. Romanov, deputy chief of the Main Economic Administration at the USSR Ministry of the Timber Industry and asked him to explain the essentials of the innovation, how it reflects the financial condition of forest industry enterprises in general and money-losing ones in particular.

The wholesale prices for timber introduced seven years ago and still in effect do not reflect the socially necessary labor costs for timber harvesting. A huge gap separates them from prices for processed products (pulp and paper, composite boards, furniture, etc). Paper workers obtain 1.1 rubles for each ruble invested, furniture makers—1.35, board manufactures 1.57. Loggers, on the other hand, cannot even get 10 kopecks. How can one talk about self-financing here? The situation is simply paradoxical: The better timber fallers work, the more timber they harvest, the greater the losses. Imagine the morale in the brigades. What is it like for them to suffer reproaches from paper or furniture makers constantly giving the loggers subsidies? And for what? For heavy, dangerous work from dawn to dusk.

In general the question arose long ago, not only for loggers, but for sawmill workers. The first step was made at the beginning of this year—new wholesale prices were set for exported logs, lumber and veneer. To some extent this improved the economic condition of forest industry enterprises. However, for most of them, especially those losing money, there were no radical improvements. They can no longer wait until 1990 for the new wholesale prices.

Thus, with agreement from the USSR State Committee for Prices, USSR Gosplan and the USSR Ministry of Finance, our ministry is making the decision to introduce, on 1 April 1989, the new accounting prices for timber: logs, ships, process firewood and lumber. This involves forest products intended for intrasector delivery, i.e., not part of state orders.

What is this price formation mechanism? First of all the action's goal is not only to pay for suppliers planned production costs, but to create conditions so they can obtain profits. After all, profits are the foundation of full cost accounting and cost recovery. This was simple for chips used to make pulp and paper: The first zonal differentiation for accounting prices was set at the level of the future, but already known wholesale price list (it goes into effect in January 1990). Ministries of union republics and territorial associations will make the markups on wholesale prices for the remaining forest products. Naturally, this is with participation by specific suppliers and customers; that means taking into account the individual conditions of their labor activities.

You understand, there is no reason to offend anybody: Everybody is in the same agency. Also, suppliers and customers have to correct economic indicators and norms. They are like containers connected together; what income one gains the other loses. However, none of them have to remain losers. I also want to note that the absolute size of economic incentives funds will not change at all enterprises in the five-year plan. Also, if

suppliers and customers cannot find a common language in working out accounting prices, the last word is with the USSR Ministry of the Timber Industry.

To assure coordination it is important to do more analysis of enterprises' financial situation. Special attention should, of course, be given to low profit and money-losing ones. It is desired, of course, that during this period customers and suppliers show a state approach to the matter, be freed from narrowly departmental egoism and not hide their reserves during the inevitable review of economic indicators and normatives. The excessive hording of scarce forest products is hardly useful to the sector.

An important step in this new price formation is to bring order to accounts between suppliers and customers. This requires a precise determination of the difference between the new accounting prices and the existing wholesale prices. Contracts between related enterprises should determine the time and procedure for paying this difference. The suggestion by economists at Karellesprom deserves attention. They propose markups on specific grades. Depending upon local conditions, a coniferous saw log, for example would have a markup of from 3 to 30 rubles per cubic meter, coniferous pulpwood, from 2.5 to 28 rubles, and process firewood for pulp and paper production, 2 to 20 rubles. A special group at the Petrozavodsk material-technical supply office will do the accounting in Karelia.

In conclusion, I want to again stress the innovation's undoubtedly progressive role. It will markedly increase loggers' and sawmill workers' economic interest in the results from their difficult labor, strengthen supply discipline, expand the horizons for activities on cost accounting, and create broad possibilities for the very rapid elimination of losses. I think there is no reason for a more detailed examination of the new price mechanism: After all methodological recommendations for its introduction have already been sent out to local units.

BUILDING MATERIALS

Development of Cement Manufacture in USSR, Abroad Viewed

81440717 Leningrad TSEMENT in Russian No 4, 1989 pp 6-8

[Article by G.K. Barbashev and A.Kh. Drozhzhin, candidates of engineering sciences, NIItsement (Scientific Research Institute of Cement): "Basic Trends in the Development of Cement Manufacture in the USSR and Abroad"]

[Text] During operation since January 1983 and during acceptance tests in February 1985 of the country's first dry method furnace unit (SMTs-20) at the Krivoy Rog plant, which has a rotary furnace that is 4.5 x 80 meters in size and a reactor-decarbonizer, its high technical-and-economic indicators were confirmed in comparison to the furnaces which are 6.4 x 95 meters in size with respect to fuel consumption in burning the clinker, specific metals intensiveness, the coefficient of technical utilization, and the resistance of the lining.

The favorable test results have made it possible to recommend the SMTs-20 as a base unit in the subsequent creation of similar units of varying productivity and also in reconstruction of wet process production lines being converted to the dry method of production and in modernizing existing lines whose size is 6.4 x 95 meters. Production lines like this have been created for the Nevyansk plant with a capacity of 3,000 tons per day and the Rezina plant with a capacity of 5,000 tons per day.

The complicated tasks of retooling enterprises which face the cement industry cannot be performed unless cement machinebuilding takes part not only in the creation, production, and delivery, but also in the installation and debugging of complete production lines for cement plants now being built and undergoing expansion, in preparing designs, and in actually carrying out reconstruction of existing production lines using the wet process with furnaces in the sizes 4.5 x 170 and 5 x 185 meters and their conversion to the dry process.

Abroad, the retooling of the cement industry began in the seventies, and in a number of industrially developed countries the transition to the dry process was completed in the eighties.

The large-scale reconstruction of the cement industry was carried out in the United States over the period 1975-1987. The old plants were shut down, a number of new enterprises using the dry process were built with production lines that had a capacity of 1.0-1.5 million tons of cement per year, long rotary furnaces were rebuilt for the dry process, and cyclone heat exchangers and decarbonizers were installed. As a consequence, the share of the dry process in the U.S. cement industry increased from 40 to 60 percent. At the present time, the

share of the dry process is 100 percent in Japan, West Germany, and Spain, and 75-97 percent in other advanced countries; the conventional wet process does not exist in France, where along with the dry process there is also the semidry process in which the slurry is filtered; and the level in Great Britain is 31 percent (this is explained by the peculiarities of the raw material).

In spite of the reconstruction that has been carried out in the cement industry of many countries in the world, the wet process is still preserved (in Denmark, Great Britain, Belgium, and the United States).

The problems of improving the burning process and of improving heat utilization in rotary kilns used in the wet process remain urgent up to this time.

Abroad, the rotary kilns in the wet process operate with a specific consumption of 185-200 kg of standard fuel with a low carryover of fines with the exhaust gases (1.5-2 percent).

This is achieved thanks to the comparatively low moisture content of the slurry (29-34 percent when diluents are used in a number of cases), by equipping the kilns with built-in heat-exchanging devices (filter-heaters, free-hanging and garlanded chain curtains, and metal heat exchangers), by strict monitoring of the optimum thermal conditions that is set up for each kiln, by minimum rarefaction at the top end of the kiln, and by maximum temperature of the secondary air. Depending on the properties of the raw material and the composition of the raw material mixture, the optimum level of burning the clinker with respect to its density is chosen for each type and size of kiln, and then fluctuations are permitted within narrow limits.

Improving the burning process in rotary kilns using the wet process of production and improving heat utilization in kilns by creating effective heat-exchanging devices, building calcinators into furnace units, and reconstruction of fire-grate coolers to increase the temperature of the secondary air to 700-800° C remain an urgent problem for the domestic cement industry.

The chain curtains (installed at the combine "Sukholozhsktsement" and the Belgorod and other plants), which make it possible to reduce the temperature of exhaust gases to 160-180°C and fuel consumption in burning to 190-200 kg per ton of clinker; the method of burning used tires in the decarbonization zone (introduced at the Razdan plant), chemical methods of lowering the moisture content of the slurry by 10-12 percent, developed by NIItsement and SibNIIproyekttsement, or the methods of adding one or several components (usually technogenic materials) to the kiln in dry form, which makes it possible to save as much as 30 percent of the heat, should be extended to the branches built in Orgproyekttsement and NIItsement.

But so far the wet process is still preferable in using raw materials with high natural moisture content. This is indicated by the data of an analysis conducted by the Lafarge firm of the influence of the initial moisture content of the raw material on heat consumption in obtaining clinker, in which electric power consumption in grinding the raw material was taken into account. The specific heat consumption when the initial moisture content rises from 4 to 20 percent rises 8-14 percent in the dry process.

Development of the dry production process abroad necessitated the creation of new equipment for primary processing, blending, grinding, and drying the raw materials. We should note here:

- creation and application of computer systems for planning optimum schemes for working deposits of cement raw materials;
- in large mines for cement raw materials use of a continuous flow scheme—excavator (front-end loader)—self-propelled crusher—and conveyor instead of the traditional cyclical technology for working the mineral (excavator, truck transport, and stationary crushing);
- creation and broad application in new dry process production lines of highly productive and automated equipment for storing the raw materials at the mixer: stackers with an output of 600-3,000 tons per hour combined with unstackers with an output of 400-900 tons per hour;
- creation and broad application of highly productive (200-600 tons per hour) roller mills to grind and dry the raw material and high-pressure press-roller crushers for the preliminary crushing of the clinker.

In the USSR, special computer programs for calculating and estimating in the design stage the reliability of operation of technologies for working mines and preparing the raw material mixture, i.e., to estimate the stability of the technology of preparing the mixture "from the mine face to the kiln," are being developed by Yuzhgiprotsement and NIItsement.

Front-end loaders on wheels with high productivity are not being manufactured in our country.

At present, our mines cannot be worked by a continuous flow-line pattern because self-propelled crushers are not in series production.

Calculations and designs for working out the possibility of using ADP-400 self-propelled crushers in the limestone mines of the Navoi and Rezina plants, done by Yuzhgiprotsement, have shown that the annual operating costs would be reduced thereby by 125,000-200,000 rubles, and the number of workers by 56.

The equipment for stores of the crushed raw material at the mixer is not being manufactured in the USSR, VNIItsemmash has only begun to work to build stackers for stores at the mixer with a productivity of 460 and 740 tons per hour and unstackers for clay.

The PO "Volgotsemmash" is proposing to begin production in 1989 of vertical roller mills in three type sizes with outputs of 100, 200, and 300 tons per hour.

Up-to-date equipment for the primary processing, blending, grinding, and drying, and for homogenization of the raw material are manufactured by the association "Zementanlagenbau" in Dessau (GDR). This equipment meets the present-day technical standard, is fully automated, and can be applied at dry process plants with a capacity exceeding 2 million tons of cement per year.

The most significant advances in the field of burning the clinker over the last 15 years have been the creation of kiln systems with prior decarbonization, which has become widespread in the world cement industry.

In the USSR, a kiln unit with a decarbonizer that has a rated capacity of 3,000 tons of clinker per day has been operating in the USSR since January 1983 on the basis of imported equipment (the decarbonizer and the fire-grate cooler).

In its technical level, this kiln unit meets the world standard, but a decision was made to refine and improve a number of units, specifically the drying drum, the equipment where the raw material and the clinker are stored, the system for homogenizing the pulverized raw material, units for sampling and sample separation, and also a gas-cleaning system, before putting the equipment of the production line in series production.

The most progressive kiln systems with prior decarbonization, "Pyrorapid" and PASEC, can be used in reconstruction of kilns of the wet and dry production methods, respectively.

When kiln units using the wet process undergo reconstruction and conversion to the dry process using the "Pyrorapid" system, developed by the firm "Humbold Vedag" (FRG), the kiln is shortened to D/L = 1:10 in order to accomplish high-speed burning of the clinker. The portion of the body of the kiln cut off from the hot end is used as a drum cooler. The kiln unit has a four- or five-stage cyclone heat exchanger and decarbonizer.

This kind of reconstruction was done for the first time at the "Erwitte" Plant (FRG) in 1981. The size of the rebuilt kiln was 4 x 40 meters, and its output 2,500 tons per day.

The second "Pyrorapid" kiln unit furnished with the same kind of short rotary kiln, a five-stage cyclone heat exchanger, a "Pyroclone" decarbonizer, and a drum

cooler with dimensions of 4.8 x 49 meters, is in operation at the "Diamant" Plant of the firm "Spenner Cement." The angle of the rotary kiln is 3.5 percent; the speed of rotation is 3.5 rpm, and the kiln is installed on two supports. Its top end has larger dimensions because of the need to connect the pipeline delivering tertiary air. The unit's output is 2,200 tons per day, and specific fuel consumption is 106 kg per ton. The material spends 50 seconds in the heat exchanger and decarbonizer, 21 minutes in the kiln (half as much as in the ordinary kiln), and 26 minutes in the cooler. The drum cooler has crusher teeth, lifters, and specially bent blades. All the lifting elements are spirally arranged. The built-in lifting elements guarantee a high degree of heat recovery (72-74 percent).

Drum coolers are again taking on ever growing importance because of their simplicity of design, operating reliability, absence of exhaust air and the need to remove the dust from it, the high degree of heat recovery and its built-in lifting elements, the possibility of using the hot air of the cooler as tertiary air for combustion in the decarbonizer and use of the truncated part of the body of the long rotary kiln as a drum cooler following its reconstruction and conversion to the dry process.

When the long rotary kilns used in the wet process undergo reconstruction and conversion to the semidry process, if mechanical filtration of the slurry is not applied, the kiln is shortened, and the portion of the body of the kiln unit cut off at the cold end is used as a drying drum. This method of reconstruction is being carried out on one of the wet process kilns with a size of 5×185 meters at the plant "Varta-1" (Poland).

The kiln was cut into two and a middle section 20 meters long was eliminated. The new unit has a length of 100 meters, and the piece cut from the cold end, which is 65 meters long, is used as a drying drum into which the limestone slurry is fed with a moisture content of 30-32 percent. It is dried with the heat of gases from the kiln and those coming from the furnace of the reactor for burning the coal shale waste, the ash from which is used as the clayey component of the raw material mixture and is fed into the two-stage cyclone heat exchanger installed between the drying drum and the kiln, where it is mixed with the dry pulverized limestone.

The cake that emerges from the drying drum, which has a moisture content of 10 percent, goes to a vertical vortical ventilated rotary tube dryer which has a hammer crusher, where it is dried with gases from the first stage of the heat exchanger and settles in the cyclone in the form of a dust-gas stream. From there, the pulverized limestone goes to a bin from which it is fed to the second stage of the heat exchanger that comes after the furnace, where it is mixed with the ash from burning the shale. The hot air of the clinker cooler is used as primary air in the reactor furnace used to burn the shale. The ratio of limestone and ash in the mixture fed to the heat exchanger is 86:14.

The present-day conception of converting wet process kilns to the semidry process, in which the wet method of preparing the slurry is preserved, consists of mechanical removal of water from the slurry in press- or vacuum-filters, which in the last decade have become reliable in operation, but they represent expensive equipment. The cost of press-filters and equipping the filtration shop represent 50 percent of the cost of the entire reconstruction project.

In order to reduce the cost of reconstruction when wet process kilns are converted to the semidry process, the firm "Smidt" (Denmark) proposes a plan for conversion that does not include installation of filter-presses, but only furnishing the kiln with a unit for a ventilated hammer crusher-dryer. The slurry is prepared by the wet method, with moisture content reduced to 30 percent, say, with flocculent additives or diluents, and it is fed into a screw conveyor together with the slurry that has been 30-50-percent dried in the crusher-dryer, or with the dust from the static precipitators, or with some technogenic product in order to obtain a material that is not tacky, whereupon it is sent to the crusher-dryer.

When dry process kilns undergo reconstruction in order to increase their productivity and economic efficiency, the progressive solution is to retool them with the system developed jointly by the firms SKET/ZAB (GDR) and "West Alpine" (Austria), i.e., to equip the kiln which has a cyclone heat exchanger with a second heat exchanger branch, and if the heat exchanger has two branches, then with a decarbonizer, and to organize subsequent zigzag passage of the entire flow of pulverized raw material (100 percent) through all the cyclones of both branches of the cyclone heat exchanger, while at the same time the flow of hot gases from the kiln and decarbonizer are divided in half and each half is passed through one of the branches of the heat exchanger.

Giprotsement and Yuzhgiprotsement have done an analysis of the operation of cement plants and have summarized the experience of reconstruction of enterprises and production lines using the wet process. Their results have been published in the journal TSEMENT (No 7, 1988, and No 1, 1989).

So far, no methods or versions have been found for reconstruction or for the feasibility of the further operation of furnaces which are 150 meters long, nor methods of outright reconstruction of kilns in the sizes 4.5×170 meters and 5×185 meters, with VNIItsemmash and the PO "Volgotsemmash" taking part in the discussion.

Because of their monopoly, the machinebuilders (VNI-Itsemmash and the PO "Volgotsemmash"), defending their own departmental interests, have been insisting on the most expensive versions of direct reconstruction of kilns and have refused to create a rebuilt unit at lower cost, i.e., in which maximum use is made of structural elements, shells, and other units, but rather they propose for kiln reconstruction units designed for new construction or a set of series-produced assemblies of the unit.

The PO "Volgotsemmash," if we look at retooling of the cement industry from the positions of the state, must examine the condition of every kiln unit scheduled for reconstruction and on the basis of those data issue recommendations as to which assemblies are to be preserved and which must be resupplied.

Here, the actual conditions of every enterprise's configuration should be taken into account: in particular, the distances between kilns. For instance, the kiln that is 5 x 185 meters and stands apart can be rebuilt to increase capacity to 2,000, 3,000, and 5,000-5,500 tons per day.

If at the plant four kilns have been set up one alongside the other, then only the two outside ones can be rebuilt to increase the capacity to 5,000-5,500 tons per day, while the two in the middle should be used simply as long dry process kilns provided the capacity of the raw materials phase is going to be designed for four production lines. Thus, a version of reconstruction needs to be developed for each particular case and each production line.

Kilns that are 5 x 185 meters are most expediently rebuilt into kiln units with a productivity of 5,000-5,500 tons per day.

On behalf of financial motivation of the builders and machinebuilders carrying out reconstruction of equipment, special unit prices should be developed for the operations of reconstruction under the conditions of enterprises that are operating.

In a number of cases, specifically for the group of plants using plastic raw material with high moisture content (chalk, marl, and very moist clays), such as the Balakleya and Amvrosiyevka Combines, the Zdolbunov and Belgorod plants and the plant "Bolshevik," it is advisable to retain the wet process, paying attention to preserving the higher quality of the clinker, the low cost of the cement, the more comfortable working conditions, and the complete absence of domestic equipment for processing raw material with high moisture content in the dry process.

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GOODS PRODUCTION, DISTRIBUTION

Statistical Survey of Republic Trade Turnover 18270078 Moscow SOVETSKAYA TORGOVLYA in Russian 21 Mar 89 p 4

[Article by Yu. Gryzanov, SOVETSKAYA TORGOV-LYA economic commentator: "Trade Turnover is Growing, Difficulties Remain"]

[Text] Experience convincingly proves that the better trade enterprises and public catering establishments operate in the cities and the countryside, the higher the rate of growth rate of retail trade turnover will be. We are talking about increasing the quality of customer service, better satisfaction of their demands, and more convenient operating conditions of stores, dining halls, and cafes for them. The opportunities for solving these problems are everywhere and we need only to skillfully use them. In the cities of Kirgizia, for example, every other store conducts business on Sundays. Trading enterprises' operating hours have been extended: every fourth store is open until 2100 hours, every tenth [store] until 2200-2400 hours. This helps to eliminate lines to a greater degree. Public catering enterprise operating hours have also been extended.

Actions taken locally for improving trade service of the population have provided certain positive results. State and cooperative retail trade turnover for January and February 1989 increased in comparable prices by 8.5 percent in comparison with the same period last year. Highest growth rates were achieved by trade organizations of Lithuania, 13.5 percent; Latvia, 12 percent; and, Kirgizia, Moldavia, and Estonia, over 11 percent. The retail trade turnover volume planned for the country in January-February was fulfilled with an excess of 1.6 billion rubles or by 2.7 percent, including a 2.8 percent increase in February.

State trade enterprises, whose retail trade turnover volume is set by State order, fulfilled the two month plan by 103.2 percent including in February by 103.4 percent.

However, the republics' contributions to these results are not identical: as usual, trade collectives of Georgian enterprises and organizations lag behind in the fulfillment of plan tasks and, in Azerbaydzhan, they do not even insure fulfillment of the State order. The retail trade turnover growth rate in this republic is three times less than in the country as a whole.

The fact that reported data indicate that work has still not been completed in some areas on concluding goods delivery contracts in volumes provided for by the plan in 1989 between manufacturing and trade enterprises causes serious concern. Thus until now, delivery contracts have still not been drawn up for confectioners' goods and fish products worth 1.9 billion rubles. Delivery contracts signed by industry for non-food items (less light industry articles) are for almost 5 billion rubles less

than what was determined by state order. USSR Ministry for Light Industry delivery contracts have not been concluded for 1.6 billion rubles worth of its goods. Contracts for the largest sums have not been concluded in the Russian Federation and in the Ukraine. Trading organizations must actively strive for the most rapid completion of this important work from industry's enterprises.

With the aggregate decline of stocks of finished goods, remaining items of outdated styles and models are still burdening trade organizations. These leftover items are quite substantial in Georgia, Azerbaydzhan, and Turkmenia. We need to develop and implement additional measures in these republics to accelerate sales of these goods and carry out appropriate price reductions on them. And, of course, we should not accumulate these goods in the future and that is why we need to constantly work with industry on reviewing the variety [of goods] being produced and, at the same time, take into account changes in the population's demand.

It is very important to ensure that industry's enterprises complete supplemental deliveries, prior to the end of the quarter, of certain goods previously delivered in insufficient quantities. Fewer goods than provided for in the plan's calculations, more than 2 billion rubles altogether, entered trade [markets] during the last two months.

Almost all union republic consumer cooperative trade organizations are increasing sales to the population of agricultural products which were purchased in accordance with contract prices. In January-February, sales in the nation increased 14.2 percent in comparable prices in comparison with the same period last year and totaled almost one and a half billion rubles. This reserve, which allows improvement of supply to the population and increase of trade turnover, must be better utilized by the cooperatives of the Ukraine, Uzbekistan and especially Georgia, where agricultural product sales volume purchased at contract prices practically did not increase in comparison with January-February of last year.

One hundred thirty million—that is the number of daily public catering service customers. However, it is still not in a condition to meet demonstrated demand. We must all proceed from this [fact] while assessing perestroyka and the development of public catering since the beginning of this year.

For the last two months, public catering establishment trade turnover (without taking alcoholic beverage sales into account) increased 3.6 percent altogether in comparable prices in comparison with the same period last year. This is one and a half times lower then the retail foodstuff sales growth rate. During the same period, the plan approved by the enterprises for January-February was 102.6 percent fulfilled.

The numbers listed are evidence of extremely inadequate public catering development rates. And the trade turnover plans approved by a number of republics do not target this sector's enterprises to accelerate development as required. Trade turnover has been increased only 3 percent (without taking alcoholic beverage sales into account) by public catering establishments of Tadzhikistan and Kazakhstan. There is also an inadequate growth rate in the Russian Federation—it totals only 3.2 percent.

In those same regions where the public catering longrange development program and its rise to a higher level of quality is being purposefully implemented, high trade turnover growth rates and their own industrial production output are steady. Thus in the Lithuanian SSR, public catering trade turnover (without taking alcoholic beverage sales into account) increased 10.1 in January-February in comparison with the same period last year; in Estonia, 13.1 percent; in Latvia, 6.9 percent; and, in Belorussia, 5.9 percent. And really the conditions and capabilities of the republics are the same. This means that the cause is in the organizational work of local management agencies.

Now Spring is coming into its own and seasonal concerns have appeared among trade [organizations]. They must accelerate complete resolution of issues with industry about uninterrupted delivery of the Spring-Summer variety [of goods] and more quickly sell winter [varieties]. The other urgent task is to prepare and establish a seasonal trade and public catering network everywhere. This will allow better servicing of the population during the Spring-Summer season and will make a weighty addition to trade turnover.

Wholesale Trade Fair Fails to Satisfy Consumer Needs

18270086 Moscow PRAVITELSTVENNYY VESTNIK in Russian No 7, Apr 89 (signed to press 30 Mar 89) p 7

[Article by S. Kuprina: "Who Is Directing the Commodity Ball?"]

[Text] "How is trade doing?"—This question, which is completely appropriate at any fair, would unfortunately be inappropriate here. Strictly speaking, no one is selling anything, although 360 wholesale bases sent their representatives. They are holding "Kultbyttovary-90" not under the conditions of freely choosing pleasing goods or business partners for the coming year but within the strict framework of sales plans, orders and specifications. The reason for this unnatural procedure for mass haggling is the shortage.

I do not want to devote a great deal of space to this word with a bad reputation, and that is why I will cite only certain preliminary data about the progress of the fair's work at the end of the article. I will try to take in at a glance the exposition itself—approximately 25,000 models displayed in the Luzhnikov Malaya Sports Arena—in an unprejudiced manner. What is our industry offering?

A great deal that is interesting. It is difficult not to pay attention to the new family of television sets with the Rubin label. A modern design, marvelous technical characteristics, additional functional devices. Take, for example, the very interesting—in my opinion—Rubin 71TTs-408DS. An indisputable merit is the picture tube with a flat screen and right angles. Here is a 20-command remote control system, a device that automatically turns the set off after a previously set time and a special connection for plugging in a personal computer.

However, I will not be able to answer accurately a question that arises naturally: When will these television sets be on the retail market? First, the trade system's "battles" with industry are continuing. Second, as experience shows, even peaceful agreements by the participants in bilateral discussions do not always promise the population a long awaited purchase. Evidence of this is the recent USSR State Committee for Statistics report on the fulfillment of the state order for the production of several types of consumer goods:

Fulfillment of the State Order and Quotas for the Production of Certain Types of Consumer Goods During 1988

	Quota	Actually Produced	Percent of Quota Fulfillment	As A Percentage of 1987
Television sets, millions of items USSR Ministry of Communications Equipment Industry —Of them, color ones USSR Ministry of Communications Equipment Industry Radio receiver devices, millions of items USSR Ministry of Communications Equipment Industry USSR Ministry of Radio Industry Tape recorders, millions of items USSR Ministry of Radio Industry	9.6 7.0 5.7 4.1 8.9 6.3 1.7 6.0 1.7	9.6 7.0 5.7 4.1 8.0 5.6 1.5 5.5 1.9	100.3 99.98 100.5 100.1 90 89 90 92 85	106 101 122 118 98 97 102 110 116
USSR Ministry of Electronics Industry	1.11	1.00	- 5	

Fulfillment of the State Order and Quotas for the Production of Certain Types of Consumer Goods During 1988

	Quota	Actually Produced	Percent of Quota Fulfillment	As A Percentage of 1987
Video recorders, thousands of items (USSR Ministry of Electronics Industry)	70.0	72.9	104	162
Refrigerators and freezers, millions of items	6.2	6.2	100.3	104
USSR Ministry of General Machine Building	2.2	2.2	100.2	104
USSR Ministry of Machine Building	1.9	1.9	100.1	106
Washing machines, millions of items	6.5	6.1	94	106
USSR Ministry of Electrical Equipment Industry	1.6	1.3	82	104
Sewing machines, millions of items (USSR Ministry of	1.6	1.6	100	105
Defense Industry)				
—Including "zig-zag"	0.9	1.0	108	103
Electric vacuum cleaners, millions of items	4.9	4.8	98	108
USSR Ministry of Aviation Industry	1.37	1.38	100.2	103
USSR Ministry of Electrical Equipment Industry	0.99	0.96	98	104
Bicycles(minus children's), millions of items	5.8	5.6	97	101
USSR Ministry of Automotive and Agriculture Machine Building	3.3	3.2	95	100.4

...However, let us return to the fair where everything is so beautiful, festive and diverse. For a minute, I picture to myself the variety of television and radio equipment, which is being displayed here, in some special Moscow store—what a line would arise....

You look and you are happy... In principle, our domestic industry can satisfy our unspoiled buyer's needs.

What does the holding of the wholesale fair testify to? Will it improve the supplying of the population with cultural, welfare and sports items next year?

Gennadiy Mikhaylovich Dvornikov, Kultbyttovary-90 deputy director, is carefully spreading documents out. "The fair is not over yet and, therefore, there are no final results. The numbers and data are still preliminary, although close to the actual state of affairs. Look here. For six positions defined by the USSR Gosplan in the state order, the increase is only three percent. Miserly! Television sets, radio receiving devices, motorcycles, bicycles, paper and white goods, and galvanic cells are included here. For a number of items, several ministries are not even maintaining last year's level: The USSR Ministry of the Timber Industry and the RSFSR Ministry of Local Industry, for example, are lowering the production of skis. Generally speaking, the situation in the consumer goods market may be worse in 1990 than now. We, of course, do not agree with this.'

However, the fair pressure mechanism is too weak in comparison with producer dictates. Of course, the fair will adopt several decisions in favor of the consumer: "increase," "raise," and "immediately adopt additional

quotas"—although the very authors of these goods decisions have little hope that they will be implemented. More often than not, the producing plants violate contract obligations and do not put the offered new items into production.

Here is such a case. In 1987, industry provided trade 733,000 television sets fewer than the quota stipulated. The year 1988 arrived, and the USSR Gosplan adjusted (of course, in the direction of a decrease) the television set production volume by another 500,000 items. Consequently, our and your—dear reader—choice will be reduced this year by more than a million television sets. Well, how will matters progress in the future? Here is how. According to information from the present fair, industry will deliver to trade organizations orders for 800,000 fewer television sets than is designated by USSR Gosplan control figures. I think there is no need for a comment here.

Of course, it is impossible to observe during a wholesale fair the specific reasons for the consumer market's instability, but it exposes its sicknesses very clearly. Until there is the free selling of consumer goods in the wholesale trade link, do not expect an abundance in stores.

In parting, I asked Gennadiy Mikhaylovich Dvornikov: "Is anything sold freely here?"

"Yes, television voltage regulators that are not needed by anyone."

Alas, the shortage is directing the commodity ball as

Industry's Failure To Satisfy Consumer Demand Detailed

18270095a Moscow EKONOMICHESKAYA GAZETA in Russian No 15, Apr 89 p 9

[Article by V. Kozlov, RSFSR deputy minister of Trade: "Who Will Take Care of the Shopper?"]

[Text] We are all shoppers and at some point go to a store for goods. Here is the trouble, however: often it is precisely the things that we need so much that are not in the store! Who has not found himself in this situation? We regret the time lost and we suffer from the fact that we could not buy precisely what we needed so much. Of course, it is the industrial enterprises that are mainly to blame for this. The half-empty shelves in the stores are also a reproach to the trade workers. They could have a more active effect on industry by achieving an increase in the production of consumer goods in the necessary quantity, assortment and smooth supply of items. How can the demands of the shoppers be more fully satisfied, what depends on industry here, and what on trade?

Under the new conditions of economic operation by the central unit, wholesale trade fairs have begun to be interrelated with production and trade. After all, the contracts concluded between the enterprises of trade and industry should ultimately determine today what items, and in what amount, will be offered to the shoppers.

What have the wholesale trade fairs that have taken place in the past year shown? First of all, the fact that in 1989 the unsatisfied shoppers' demand for goods for cultural-everyday and household purposes and haber-dashery items in the RSFSR is increasing by 22 percent, or by 8.7 billion rubles. The enterprises intended to reduce or fully discontinue the manufacture of 120 million rubles worth of various small items, or by 10-fold. As before, there will not be enough sewing and washing machines, vacuum cleaners, refrigerators, furniture and electric household appliances. Gardeners can scarcely manage to acquire motorized lawn mowers—they hardly enter the municipal trade network. The situation with respect to tooth paste, soap, detergents and razor blades is particularly disturbing.

We do not have to rejoice together over the updating of the assortment. Out of 1046 samples of new household items, only 7(!) of them can actually be called new, and out of 986 samples of cultural-sports commodities—15. There are no "new" items at all in the haberdashery output.

What is the reason for this situation? First of all, the planning of goods production for the people at the site is still inadequately coordinated with the placing of the State order. As we know, it is placed with the enterprises of the Ministry of Light Industry only according to the products list (in volume about 40 percent of the production of these goods). Most of the enterprises of the remaining ministries enter the State order for consumer

goods only in cost terms. Therefore, one of the tasks of the wholesale trade fair is to coordinate the production of consumer goods by cost and products list in accordance with the needs of the population.

If they do not have a State order, however, the industrial enterprises naturally cannot fully satisfy the orders for trade. After all, under these conditions there is no guaranteed raw material provision to produce the goods ordered by trade. This emasculates the very essence of the wholesale trade fair!

For example, last year, in the first six days of the trade fair for wholesale sale of radio goods, it was impossible to coordinate a single specification. The Yelets Element and Riga Electric Light Bulb plants—who have the monopoly in the manufacture of zinc-mercury elements and photolamps used in movie film equipment—simply could not sell their products.

In addition, in the course of the trade fairs themselves, the enterprises repeatedly change both the assortment and the volumes of goods offered. This sort of leap-frog led to the Novocherkassy Electric Locomotive Building Plant refusing to supply 25,000 Uralmash washing machines—and 20,000 Malyutka compact washing machines. On the pretext that there was not enough raw material for goods not included in the State order, industry began to refuse to manufacture many household "trifles" needed by the population. The USSR Ministry of the Chemical Industry, for example, discontinued the output of cleaning devices and plastic items, the USSR Ministry of the Machine Tool and Tool Building Industry-the garden-orchard stock, and the USSR Ministry of Chemical and Petroleum Machine Building-locks, washboards and juice extractors. Instead of tea kettles and canisters, local industry foisted off tanks and buckets.

The industrial enterprises are not satisfying the trade orders this year. It became clear even before the start of the wholesale trade fairs that in 1990 the shoppers would obtain refrigerators and ice makers, but instead of in the required amount of 4,470,000 units, only 2,670,000 units (59.8 percent), and of sewing machines—instead of 2,200,000 units, only 950,000 units (38 percent).

When refusing, at the wholesale trade fairs, to conclude contracts with trade, many industrial enterprises plead a shortage of raw material. Often, however, this argument conceals the basic lack of desire to work with allied workers. In particular, the garment industry time and time again put the blame on a fabric shortage and the inefficient distribution of funds for them among the enterprises. This year the fabric distribution according to those holding funds and the organization of their sale at wholesale trade fairs was entrusted to the USSR Ministry of the Light Industry itself. What happened? The provision of fabric for the garment factories became even

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worse. While in 1988 their shortage was only 258 million meters for the garment makers, in 1989 it is 371 million meters. Who, one asks, can be blamed now?

There are, naturally, shortcomings in the work of the wholesale trade organizations as well. Often they strive to get the plan for wholesale commodity turnover a bit lower, in order to be sure to fulfill it. This is how, for example, four of the seven wholesale enterprises of Astrakhan Oblast, and Rostorgodezhda in Rostov Oblast acted. The stand of the trade organizations could have been more active in the matter of utilizing local possibilities for increasing the trade mass. Let us take, for example, regions with approximately identical populations-Volgograd and Saratov oblasts and Stavropol Kray. In the first of them the enterprises of the local industry produce 28 million rubles worth of garment items a year, in the second-34 million, and in the third—67 million. After all, what can be achieved here, if they undertake to solve the problems together with the local Soviet organs! If they do not undertake it, the following cheerless picture is obtained.

At the end of 1988, the RSFSR State Committee for Statistics investigated 33 specialized stores trading in household goods. At half of the stores investigated, from 34 to 64 percent of the simplest household items mentioned were on sale. At every other store there were not on sale, for example, sieves and lattices, clothes pegs for laundry, garden watering cans and axe handles, in every third store—griddles, containers for powdered material, clothes racks and coat hangers, grids for bathtubs and basins and shafts for shovels, and in every fourth store—flat-nose pliers and garbage cans. Brooms were sold in only four stores.

In all the stores investigated in Orenburg Oblast the simplest household goods, such as measuring tapes and metal measures were not for sale; the stores of the North-Osetian ASSR had no graters of various sizes, clothes pegs, clothes racks and coat hangers, brooms or garden watering cans; in Kalug Oblast—no griddles, sieves and lattices, containers for powdered material, flat-nose pliers and brooms.

It is probably clear to everyone that all the goods enumerated can be produced at the sites with the forces of the existing enterprises. The only thing necessary for this is to organize properly the work of the enterprises of local industry. Or else, what will really happen: only 55 percent of the assortment of the simplest household goods presented in the stores of the Russian Federation are goods produced locally, and furthermore, in Lipetsk and Saratov oblasts—only 33 percent, and in Novgorod and Orenburg oblasts—41-43 percent.

It amounts to the fact that Sverdlovsk Oblast is sending off flat-nosed pliers to Magadan Oblast and at the same time is importing them from Khabarovsk Kray and Gorkiy Oblast, the household tongs are appearing in Kaluga Oblast, and are being sent from Gorkiy and Perm oblasts. Saratov Oblast obtains various graters from the Chuvash ASSR and Voronezh Oblast and exports its own graters to Omsk Oblast. The latter, in turn, supplies Saratov Oblast with garbage cans, satisfying its own needs for this commodity through the supplies from the Udmurt ASSR and Tomsk and Kuybyshev oblasts.

The real misfortune has become the lack of inexpensive items for sale. EG has repeatedly written about this. All the same, just as before, one after the other the enterprises refuse to produce the cheap goods that are not advantageous for them. This indicates the imperfection in the economic mechanism in stimulating the production of these goods.

For example, the Moscow Leather Association of Dyers is planning to reduce the output of shoe cream in the amount of 22 million jars a year, and the Novomoskovskbytkhim Production Association in the amount of 11.5 million jars.

The Krasnodar Pianino Factory is planning to take off production this year the output of coat rack-coat hangers in the amount of 60,000 units. After all, the orders from the Krasnodar Roskhoztorg Wholesale Enterprise for these racks is already undersatisfied by 130,000 pieces. Consequently, it will have to import them from other regions in the country.

The Murom Plywood Plant is taking out of production 20,000 units of flour sifters. The argument is that there is no raw material to produce them. Meanwhile the orders from the Roskhoztorg Wholesale Enterprise in Vladimir is presently unsatisfied in the amount of 5000 units.

These are the ways to force a shortage of inexpensive items on the consumer market!

On the other hand, the total amount of goods entering the stores is being reduced. I will cite a characteristic example, using leather haberdashery items. While in 1985 the enterprises of the RSFSR Ministry of the Light Industry produced 9,700,000 women's handbags made of leather substitutes, in 1989 almost 600,000 less of them will be produced, and 375,000 fewer gloves and 1,080,000 fewer suitcases. Despite the reduction in the number of goods produced for the population, however, plans for the production volume and profit are being fulfilled and overfulfilled. Here is the reappearance of the dictate of gross indicators over natural ones, and the possibility of obtaining profit through understating the prices of the goods produced.

All of this indicates that possibilities must be sought, within the framework of the new economic mechanism, for fuller satisfaction of the population's shopping demand. This would be furthered, in our opinion, by a measure such as this: establish republic (interoblast) volumes for the supply of consumer goods, stable for the five-year plan. Everything that is produced above these volumes is left fully at the disposal of the local Soviets.

This would be in accordance with the principles of regional self-financing and self-government and would make it possible to arouse the interest of the Soviet and economic directors in expanding the production of goods at the sites.

One other measure could integrally augment the preceding one. It must be taken as a rule that new goods are left on sale at the sites for the first year of their output. This would not only stimulate the updating of the item assortment, but would also contribute to a greater balance between the commodity mass and the monetary means of the population in a given region.

We also feel that a very effective lever for increasing the interest of industrial workers would be the establishment of a relation between the percentage of withholdings for the material incentive fund and the growth rates of the relative proportion of consumer goods in the overall volume of goods produced. Not bonuses, but wages can also be stated in relation to the increase in the production of consumer goods.

The organizations of the RSFSR Ministry of Trade have already been working for over a year using the second model of cost accounting. The results of the work show that the reserves began to be used more energetically, and more initiative began to appear in the searches for additional trade resources, including through drawing in cooperative and individual producers for these purposes. Last year the commodity turnover of commission trade in RSFSR State Trade rose by 700 million rubles as compared with 1987 and was 3.2 billion rubles. Commodities amounting to a sum of 750 million rubles manufactured by cooperatives and individuals were sold. The trade organizations are set a task—utilizing the cost accounting mechanism of economic operations, achieving the satisfaction of the shoppers' needs and improving their service.

Quality of Goods Inspected by the Main Administration of State Quality Inspection of Goods and State Trade Inspection of the RSFSR Ministry of Trade

Description of Goods	Rejected and reduced quality grade, in percentages of quantity inspected 1987 1988		
Nonfood Items:			
Garment items	12.7	16.3	
Hosiery items	6.2	7.6	
Rubber footwear	9.6	10.8	
Furniture	15.4	15.9	
Electric heating devices	24.8	26.5	
Electric lighting equipment	5.6	26.6	
Television sets	18.0	19.5	
Radios and record players	14.8	19.2	
Assorted glass dishes and crystal items	7.8	38.6	

Foodstuffs:		
Bread and rolls	3.9	5.1
Confectionery items	4.9	5.4
Meat	6.3	8.5
Fish and fish products	8.7	9.8
Milk and dairy products	3.2	. 3.7
Margarine products	6.0	11.6
Cheese of all types	4.9	6.4
Canned fruit and vegetables	9.0	10.6
Nonalcoholic beverages	10.0	11.9
Eggs, hen's	22.6	25.4

Retail Trade Turnover Statistics Jan-Mar 89
18270095b Moscow SOVETSKAYA TORGOVLYA in
Russian 23 Apr 89 p 3

[Article by Yu. Gryzanov, economic reviewer of SOVETSKAYA TORGOVLYA: "Trade Plus Initiative"]

[Text] As has already been reported, the volume of commodity turnover in the plan for this year was increased by 9 billion rubles. In consideration of the addition, it should be 394 billion rubles on the whole for the country, which is 27.6 billion rubles, or a commodity turnover 7.6 percent larger than that achieved last year. The assignment is stepped-up, requiring the mobilization of forces of the work collectives in all sections of the sector's work and a rise in the results achieved since the beginning of the year.

In the first quarter of this year the volume of commodity turnover rose by 7.7 billion rubles as compared with the first quarter of last year, or by 8.8 percent (in comparative prices). The quarter's assignment was exceeded by 2.4 billion rubles. This included the State order, established for the state trade enterprises, and was fulfilled with an increase of over 2.3 billion rubles.

The trade collectives of the union republics, without exception, coped successfully with the fulfillment of the quarter's plan for wholesale commodity turnover and the State plan. It is gratifying to note that the collectives of the trade organizations of Georgia and Azerbaijan, which had previously lagged behind the plan's milestones, entered into the rhythm of plan fulfillment. The weightiest results in the development of commodity turnover were achieved by the enterprises and organizations of Lithuania, Latvia, Moldavia, Estonia, Belorussia and the cities of Moscow and Leningrad, where, as compared with the first quarter of last year, the volume of commodity turnover was increased by over 10 percent.

The commodity turnover in public catering for the past quarter was increased at comparative prices by 6.7 percent as compared with the first quarter of last year. The quarterly plan was fulfilled by 103.6 percent by the culinary workers, or exceeded by 269 million rubles. The

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milestones specified by the plan were ensured by the collectives of the public catering organizations of all the union republics, with the exception of Azerbaijan.

In the first quarter the public catering enterprises earned and sold 5.7 billion rubles worth of goods of their own output, which is 4.5 percent more than in the same period last year. The collectives of the public catering enterprises considerably increased their output: Lithuania—by 10.5 percent, Georgia—by 9.8 percent, Latvia—by 8.4 percent, Belorussia—by 7.6 percent and Kirghiz—by 7 percent. The culinary workers of other regions had to utilize their experience more fully in

solving such an important social problem as complete satisfaction of the people's demands for public catering services, as well as for the growth of commodity turnover.

An alarming situation has developed in capital construction. For the first quarter the utilization of funds for capital construction for the sector of "trade and public catering" was only 15 percent of the year's limit, which threatens the fulfillment of the program of accelerated development of the material-technical base of trade. Tajikistan, Kirghiziya, Uzbekistan, Turkmeniya, Georgia and Azerbaijan permitted the greatest lagging behind in the utilization of the funds allotted.

The USSR State Committee for Statistics Reports
The overall volume of retail commodity turnover for the union republics in January-March 1989

	1	2	3	4	5	6
USSR	94169	102.6	104.3	2426	3853	108.8
RSFSR	52072	102.2	105.1	1137	2505	108.6
Moscow (city)	6813	106.2	106.1	395	394	110.0
Leningrad (city)	2436	105.2	105.2	121	121	110.1
Ukrainian SSR	15682	101.7	101.8	270	280	109.4
Belorussian SSR	3615	105.6	105.6	193	193	110.2
Uzbek SSR	3878	101.5	101.5	56	56	106.2
Kazakh SSR	4385	102.5	103.6	108	153	107.1
Georgian SSR	1498	101.0	101.0	15	15	110.2
Azerbaijan SSR	1321	102.7	102.7	34	34	107.7
Lithuanian SSR	1498	111.6	111.6	156	156	113.9
Moldavian SSR	1240	106.7	106.7	78	78	110.5
Latvian SSR	1235	107.9	107.9	91	91	111.5
Kirghiz SSR	948	102.0	102.0	18	19	110.3
Tajik SSR	877	101.3	101.8	11	16	106.1
Armenian SSR	926	104.9	104.9	43	43	113.2
Turkmen SSR	787	102.6	102.6	20	20	108.8
Estonian SSR	760	107.2	107.0	51	50	110.5

- 1. Actual, in million rubles.
- 2. Percent of fulfillment of established plan.
- 3. Percent of plan fulfillment by total of enterprise plans.
- 4. More or less (-) sold than established plan, in million rubles.
- 5. More or less (-) sold than the plan according to the total number of enterprise plans (in million rubles).
- 6. January-March 1989 in percentages of January-March 1988 (in comparable prices).

The sector's workers entered into the fulfillment of the stepped-up plan for commodity turnover in the second quarter. Intensification of commercial activity is a very important contribution to successful realization of the work outlined.

It is no secret that the shoppers are now complaining to the Ministry of Trade and to the newspaper about the shortage of clothing, footwear and a number of culturaleveryday and household items. Let us add to this the queues for soap and detergents, sugar coupons and in some places for certain other products, and we obtain a complete picture of the unsatisfied, solvent demand of the population. What is the attitude toward this? I think that the business man who fears the rustling of "spare" money in the consumers' pockets is wrong on three counts. During the present annoying failures in satisfying the demand for goods, he, as a professional, should still have the ability to see the capacious future for the development of trade, and not only see it, but also try to find an appropriate commodity alternative for the "spare" rubles of the shopper. The organs of the trade administration on all levels, and its wholesale unit, must first of all achieve prompt and full-volume arrival of additional commodity resources allotted for sale to the population, including those purchased by import.

Along with this, the trade organizations should immediately demand from the suppliers the goods that were to

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be supplied in the first quarter. The total amount here is large—2.7 billion rubles worth, including 400 million rubles worth of short-supplied food products and 700 million rubles worth of potatoes and fruits and vegetables and 600 million rubles worth of various items from the light industry enterprises. Contracts have not been fulfilled and many suppliers of cultural-everyday and household goods owe their trade organizations a billion rubles. Their very rapid arrival on the trade network must be achieved. Goods plus initiative are now determining success in the matter.

HOUSING, PERSONAL SERVICES

KaSSR Reduces Housing Shortfall

18000736 Moscow PRAVITELSTVENNYY VESTNIK in Russian

No 5, Mar 89 (signed to press 2 Mar 89) p 7

[Article by A. Rotmistrovskiy, TASS Correpondent: "The Plan and The Waiting List"]

[Text] Apartment waiting lists have grown far faster then new homes for many years in Kazakhstan. Mass construction has only developed in the republic's cities and villages since 1987: The "Housing-91" program has begun to be implemented.

"The program's main force," says E. Bashmakov, first deputy chairman of the republic Council of Ministers, "is the awakened initiative in new economic conditions and the possibility of realizing the advantages of economic reform. Of course, these advantages are not independently making themselves a reality. The republic's Council of Ministers had to literally nudge enterprises and sectors toward regulating the flow of the construction production line, to obtain full capacity at frame and panel prefabricated home-building plants and shops, and to develop massive home construction."

"It was difficult overcoming inertia," continues Yevgeniy Fedorovich, "This cost the 'Housing-91' program to pick up 'cruising' speed and delays began. In particular, there were not enough cementing [binding] materials. Scientists and experts found an alternative: They used ashes, slag, and lime in it..."

Despite this, the increased tasks for the introduction of housing are being outstripped from housing block to housing block of the republic. Already more than 40 percent of the people on the January 1987 housing list have been moved into State, kolkhoz, or cooperative apartments, or into their own homes. And the Council of Ministers is developing ideas for further acceleration of housing construction, is suppressing slumping trends which arise here and there in their initial stage, is strictly monitoring to see if the social sector is keeping pace with the introduction of manufacturing capacities everywhere, and is keeping watch so that apartments of low quality and few conveniences are not hidden behind the

generally favorable "gross output." Prefabricated homebuilding plants have converted to three-shift operations to accelerate the work and have begun to more widely enlist future apartment dwellers for applying finishing touches to apartments.

New oblast ispolkom subdivisions have been established—the main planning and economic administrations. The Council of Ministers is pressing for them to assign primary importance, not to square meters assigned, but to progress on apartment lists. The best forces of the design, scientific, and construction organizations have been concentrated on the development and introduction of improved planning decisions. Experimental construction of facilities with non-traditional heating sources, hot water supplies, and automated guidance of engineering networks and equipment is being accelerated. "Remzhilfond-2000," a comprehensive republic program, is being developed and will define the tasks of major repairs, reconstruction, and modernization of homes.

In a word, the republic's government and local council agencies, striving for a ten percent monthly fulfillment of the yearly housing plan and concerned about the quality of apartments, are making the "Housing-91" program a reality. Incidentally, this is only the first part of a much broader and more comprehensive program planned up to the year 2000. It was conceived with the calculation of bringing the republic's floor-space norm to 15 square meters per person by the end of the century.

Need For Differentiation in Apartment Rents 18270080 Moscow EKONOMICHESKAYA GAZETA in Russian No 12, Mar 89 p 16

[Article by Ye. Fayerman, chief scientific associate of the USSR Academy of Sciences Central Economy and World Institute and doctor of economic sciences, and G. Bozhedomova, candidate of technical sciences: "Subsidies Are Losing Their Prestige or How To Eliminate Leveling in Rents"]

[Text] Housing and communal services and subsidies from the state budget.... Long ago, we somehow became accustomed to the inseparability of these two concepts. Indeed, the state annually allocates approximately seven billion rubles to pay for the thermal energy expended during heating and the supplying of hot water. Let us add to this another 10 billion rubles expended from the budget for the capital repairs of buildings and we will have a definite picture about the annual percentage of assets "melting away" from the state pocketbook into the housing and communal services branch. However, let us try to delve into the justice of this wording of the matter.

Yes, our rent is the lowest in the world today. According to the rates established in 1928, the tariff for a square meter of housing area is 16.5 kopecks and—considering preferential terms—even lower for families with many

children, the lower paid population category and students. On the other hand, the construction of a square meter of housing now costs the state approximately 220-250 rubles, and rent does not cover the expenditures for new construction and even for the capital repairs of housing. State expenditures to maintain housing assets, which are not covered by rent, are growing at high rates. What kind of cost accounting can one talk about in the branch under these conditions?

We immediately foresee an objection by the readers: We know, they say, in what direction the authors are leaning—they will justify an increase in rent. Social justice? How, they say, can it be? However, the subject concerns this.

Let us discuss it: When relative equality in housing conditions existed, subsidies actually fulfilled a positive social function. At the present time, however, significant differences in the supply of housing and in its quality have appeared. Moreover, the country is solving a very complicated housing problem while shifting all branches to complete cost accounting. This means that subsidies are losing their purpose and, we will be so bold as to state, are being transformed into a source of social injustice—no matter how paradoxical this may sound.

Consider: Where do subsidies running into the billions come from? Equally from the "pocket" of everyone who creates our public consumption fund—regardless of whether an individual lives in a well appointed apartment or in a "common housing area."

There exist interesting statistics which go beyond the limits of "averaged" data. In 1970, population groups of moderate means had 4.04 square meters of total housing area per individual, and well off groups had 18.59 square meters. The situation changed in 1980 in favor of the well-off population groups: The groups of moderate means "possessed" 4.03 square meters per individual but the well-off groups had 26 square meters. In other words, the present mechanism is not smoothing out but increasing social differentiation.

The question now arises: Can the housing problem be examined in isolation from all of society's economic life? Of course not. Now, when we are shifting to new management methods, housing has simply been called upon to become part of the benefits that are primarily distributed according to one's work. It is only in this case that we will manage to eliminate all defects.

Well, but what should we do with rent? It is clear—differentiate it. Turn to the experience of other countries and you will see: In Hungary and Bulgaria, for example, apartments with all and partial conveniences are paid for differently and the area of auxiliary premises and the location of the building—in the center or on the outskirts—are taken into consideration.

Let us point out that cooperative housing in our country costs the population twofold-threefold more than state housing. We will mention this because, in our opinion, it is in cooperative housing that the principle of cost recovery is most fully realized.

Let us now turn to the materials of the 27th CPSU Congress. They directly point out: "It is necessary to encourage the construction of cooperative and individual housing in every way possible.... Proposals about introducing justified changes in the housing payment system, which closely link it with the size and quality of the area occupied, deserve attention." Towards what is the party orienting us? Toward the introduction of genuine cost accounting principles into housing and communal services. It seems that this is a very correct and objective approach to the task. It is already time to end a situation where they approach the payment for housing from a position of leveling.

It is necessary to recover state expenditures on the construction, operation and maintenance of housing. The principle of social justice must also operate in the housing and communal services area. As many specialists think, a rent differentiation scale will help its introduction. One can take as its basis, for example, the existing tariff—16.5 kopecks for a square meter of total housing area. Let this be the payment for living in a state-owned building without communal conveniences, on the first or higher floor, and in a rural area. The adjusting coefficients should consider the floor, type of building, locality or location in a population center, level of conveniences in the building and apartment, excess housing area, social position of the tenants (multichildren families, students, retirees), and the apartment's population density.

As our calculations show, the best well-equipped housing should be paid for at a 2.5-fold rate higher; and communal—at a rate 10-30 percent lower than the tariff now existing.

It is interesting that the 4 January 1928 USSR Central Executive Committee and Council of People's Commissars decree "On Housing Policy" established the size of the rate—16.5 kopecks per square meter. On the average, it was limited to 10 percent of a family's income. What kind of metamorphosis has occurred with this figure during the years that have passed? The percentage of expenditures for rent and communal services turns out to average three-four percent today.

It is clear from this that the mechanism for differentiating rents, which we are suggesting, implements the principle of social justice in the use of housing and does not contradict the social condition that has taken shape historically about not exceeding 10 percent of a family's income. In return, rent is transformed into a solid source for replenishing housing and communal facilities assets. Generally speaking, they will grow by 9-10 billion rubles in the country. As a result, it will be possible to eliminate

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state budget subsidies for the capital repairs of housing and direct additional assets toward the development of the other branches in the social field that are so required by us.

When examining the situation that has taken shape with rents, one cannot disregard such a problem as establishing joint enterprises with Western firms to design equipment and facilities for housing and communal facilities. It is not necessary to prove their benefit: The preconditions for an accelerated shift to new technologies and an improvement in the organization of production are thereby established. The housing and communal service facilities have still not spoken in this respect, although the branch is in a very real "trap."

It is housing and communal services that require 25 percent of the entire amount of fuel and energy resources and water that are expended in the country; however, the accounting and monitoring instruments are catastrophically lacking. Yes, and their level leaves much to be desired; Medical technical equipment is short-lived and primitive. The branch will hang like a heavy weight on the state budget if its "cure" is not undertaken in earnest. Incidentally, we have already been talking about this for approximately two dozen years; however, the matter has not advanced further than resolutions by regional and branch meetings and various types of scientific and practical conferences. We see a way out in the active use of the experiences of foreign firms and the establishment of joint enterprises, the acquiring of the best examples of communal and medical equipment, and the purchasing of licenses and "know how."

What, you will say, does all of this have to do with rent? Let us explain. Foreign currency is required to expand the branch. It is possible to find it, again without violating the principles of social justice. We are proposing that rent from citizens, who are abroad for a long time on a business trip, and a rental fee from lessees of premises, who receive their income in foreign currency, be collected in a foreign currency form calculated on the amount of the Soviet apartment or lease fee. This accounting procedure can be extended for the time that a citizen is on a business trip regardless of whether his family is living with him abroad or in the USSR and whether he is an apartment tenant or not. In our view, social justice is strengthened by this during the distribution of incomes. You see, rent is part of current expenditures which must be covered from basic income. A family's basic income during the time it is abroad on business is its wage in foreign currency.

For the lessees of premises, who receive mixed income (in foreign currency and Soviet rubles), the lease fee can be the total of two parts: the first—in foreign currency; and the second—in Soviet rubles. The ratio of the foreign currency part and the Soviet ruble part should correspond to the proportion of income.

Will this procedure correspond to the principles of territorial cost accounting which is knocking on the door more and more strongly with each day? It undoubtedly will. Is it really unjust if enterprises and organizations, which are located on a local council's territory and which have income in foreign currency, make a payment in foreign currency for labor resources when they have sent people to work abroad and diverted them from developing the territory's economy? It is justified in all respects. That is why, in our opinion, it is necessary to implement the mentioned principles.

Table 1: Number of People Who Have Improved Their Housing Conditions (millions of people)

	1971-1975	1976-1980	1981-1985	1986-1987
Number of persons who have received housing or built their own apartments	56.1	51.0	50.0	22.0
—Of them: Who have received housing or built their own apartments in new buildings	41.5	37.2	35.5	15.4
Who have received or expanded their housing area in previously built houses	14.6	13.8	14.5	6.6

Source: USSR State Committee for Statistics data

Table 2: Improvement of Housing for the Population in Cities and Urban Type Settlements According to Union Republics

	198	6	1987		on 1 Janu	Size of housing area, prescribed by the ispolkoms of the councils of people's deputies for settling the account of those needing improved housing,	
	Number of families and single persons who improved their housing, thousands	Of them, those persons included on a waiting list as a percent of the number on the books	Number of families and single persons who improved their housing, thousands	Of them, those persons included on a waiting list as a percent of the number of those on the books	Number of families and single persons on the books , thousands	As a percentage of the total number of families and single persons	square meters
USSR	1762	13	2015	14	13561	23.2	6.3
RSFSR	1214	13	1382	15	8785	25.1	6.8
Ukrainian SSR	218	9	242	10	2276	20.5	6.0
Belorussian SSR	60	10	70	12	585	29.2	6.7
Uzbek SSR	35	14	43	18	243	13.7	7.0
Kazakh SSR	82	12	107	16	562	21.2	8.0
Georgian SSR	18	16	18	13	126	16.5	5.0
Azerbaijan SSR	19	14	20	14	133	16.0	6.0
Lithuanian SSR	21	14	24	14	144	18.1	5.0
Moldavian SSR	18	12	20	12	173	27.3	6.0
Latvian SSR	20	13	18	11	141	21.1	5.2
Kirghiz SSR	10	14	9	11	79	18.6	7.0
Tajik SSR	10	12	22	27	83	22.9	6.0
Armenian SSR	12	11	12	13	88	16.7	5.0
Turkmen SSR	9	18	11	20	98	27.5	6.0
Estonian SSR	16	32	17	37	45	11.1	6.0

Source: USSR State Committee for Statistics data

ELECTRIC POWER GENERATION

Planned Energy Price Increases for Plants, Farms Criticized

18220140 Moscow ARGUMENTY I FAKTY in Russian No 21, 27 May-2 Jun 89 p 2

[Article by S. Khasanov, engineer from the city of Meleuz, Bashkir ASSR: "A Secret of the Ministerial Court"]

[Text] The USSR State Price Committee [Goskomtsen] decree No 398 of 12 July 1988 confirms the new price list No 09-01 "Prices for electric and thermal energy," which is planned to go into effect on 1 January 1990. The new price list calls for price increases for electric energy averaging 1.5-fold for industrial enterprises and 3-fold for kolkhozes and sovkhozes. There is a significant increase in the price of thermal energy.

All industrial enterprises, kolkhozes, and sovkhozes are energy intensive. This means that an increase in the price of energy resources automatically raises the wholesale and retail prices of all industrial and agricultural products (the production cost of all goods produced becomes greater). In the final analysis this is reflected in the budget of each family.

Almost all of M.S. Gorbachev's speeches say that in the next few years we will not follow the course of raising prices for goods, that this contradicts our policy and the spirit of perestroyka.

I would like to know how the USSR Ministry of Power and Electrification succeeded in its narrow departmental interests to "push" a price increase through Goskomtsen and how, as a result, it created the conditions for adjusting the ministry's shaky financial affairs at the expense of the family budget.

Why are such extremely important matters, concerning the country's whole population, handled on the sly and resolved within the walls of the interested ministry?

Armenia AES Conversion Scheduled Within 2 Years

18220096a Yerevan KOMMUNIST in Russian 26 Feb 89 p 1

[Interview with S. G. Arutyunyan, first secretary of the Armenian Communist Party Central Committee, by ARMENPRESS correspondent: "A TETs Will Rise in Place of the AES"]

[Text] The first power generating unit was taken out of operation at the Armenia AES yesterday. In 3 weeks the second power generating unit will be shut down. It has been decided to convert the nuclear electric power station into a heat and electric power station.

An ARMENPRESS correspondent met with S. G. Arutyunyan, first secretary of the Armenian Communist Party Central Committee, and asked him to respond to several questions.

[Correspondent] Suren Gurgenovich! The shutdown of the first power generating unit took place in a businesslike, routine manner, without the sounds of an orchestra or applause. But after all, this is a very important event, in my view. And not only for our republic.

[Arutyunyan] I am not one who likes high-flown words. All the same, I cannot refrain from a certain amount of gerneralization on this day. For the first time in world practice, a nuclear power station is being taken out of operation in man's interests and for his well-being.

As with every pioneering decision, this one was not easy to make. It is common knowledge that the people in the republic have been expressing their uneasiness about the location and operating condition of the Armenia AES for a long time.

The nuclear power station has been in the immediate proximity of Yerevan, in an area of increased seismic activity and high population density. A reservoir of drinking water that is very important for the republic is situated here.

Technical factors were added to these psychological, moral, and ecological arguments following the accident at the Chernobyl AES. The demands made on nuclear power stations were sharply increased. And it turned out here that for a number of reasons it was impossible to find a solution to the problems associated with the technical renovation of the Armenia AES which would ensure its improved radiation and nuclear safety and reliable operation in the future.

Last June the Armenian Communist Party Central Committee proposed to the national organs that the power generating units of the AES be taken out of operation in order to close the AES in the coming 2 years. The republic's proposal met with support and understanding in the CPSU Central Committee and the USSR Council of Ministers. The closing of the Armenia AES was announced definitely in a report at the September (1988) Plenum of the Armenian Communist Party Central Committee.

The destructive earthquake has seriously complicated the seismic situation in Armenia. And we once again turned to the CPSU Central Committee and the USSR Council of Ministers with a request to close the AES at the earliest possible time. Today the working people and all residents of Soviet Armenia welcome the USSR Council of Ministers decree on the shutdown of the Armenia AES ahead of schedule with deep gratitude.

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The decision made on the Armenia AES by no means repudiates the prospects for development of the country's nuclear power. It will be developed, and there was a lengthy discussion about this recently during M. S. Gorbachev's meetings at the Chernobyl AES and in the city of Slavutich. The questions are being raised in a different way: how to increase the safety of nuclear power stations and where to locate them. These questions have been advanced to the forefront today.

An outstanding collective has been put together at the Armenia AES. Workers, employees, and all the station's engineering and technical personnel have been working in a well-coordinated and united manner all these years, with high efficiency and professionalism, and with deep understanding of the great responsibility with which they have been entrusted. Their difficult and selfless labor has won the gratitude and respect of our people. Now they will have to work under new conditions. I am confident that they will be up to this task as well.

[Correspondent] The decision that was made was the best one, but by no means a simple one for our republic, of course. The most complicated problem which arose in connection with the shutdown of the AES ahead of schedule was: how do we provide for a steady supply of power for the republic?

[Arutyunyan] There can be no two opinions here. If we do not take radical and expeditious steps to ensure that energy is economized everywhere and to increase the appropriate energy capacities, the national economy and population not only of the republic, but the entire Transcaucasus region, will have serious difficulties, especially in the fall and winter period. The task is made even more complicated by the fact that the extensive work to restore the cities and villages destroyed by the earthquake will require significant additional energy consumption.

Taking the situation that has taken shape into account, the Armenian Communist Party Central Committee and the republic's Council of Ministers have worked out constructive measures to ensure balanced use of electric power. It was decided to convert the AES into a heat and electric power station, expansion of the Razdanskaya GRES with four new power generating units is being speeded up, the efficiency of the power stations in operation is to be increased, and renovation and technical reequipment is planned for all the power generation capacities.

The AES is to be converted into a heat and electric power station in 2 years. At the same time, it is extremely important to retain the experienced collective of the AES, its highly skilled personnel and its work traditions. The station's workers will be taking part today in the development of a new heat and power project. Moreover, they have to resolve complicated problems related to the deactivation and dismantling of equipment and

the removal of radioactive materials from the territory of the AES. We are confident that this work will proceed smoothly and efficiently, at the highest professional level.

A certain amount of time will naturally be required to completely carry out all the measures planned to make up for the energy shortage that has been created. The basic course, and essentially the only one, for us today to ensure a steady supply of power for the national economy and the people of the republic is by making every possible economy in the use of electric power. And no one should remain aloof here.

Recently the Armenian Communist Party Central Committee, the Presidium of the ArSSR Supreme Soviet and the ArSSR Council of Ministers appealed to all working people and residents of the republic to demonstrate high civic maturity and a sense of patriotism in implementing the national program to economize electric power consumption. I will say this: economizing electricity is the common task of all the people. We will be zealous, and we we will be able to work calmly and confidently, without malfunctions and shutdowns. We should be deeply aware of this today—from the party, soviet, and economic organs to the ordinary workers.

A task that is no less important for the republic's power generation workers is to ensure a reliable increase in the capacities at the heat and power stations now in operation and to speed up construction and commissioning of the first power generating unit of the section being expanded at the Razdan GRES. Construction of the new power generating units at the Razdan GRES should become a project for all the people in the republic.

Wind Power Seen as Alternative to Thermal Power

18220096b Moscow PRAVDA in Russian 30 Mar 89 p 5

[Article by A. Boldinyuk: "Who Will Help the Wind?"]

[Text] It is customary to consider a windmill something that existed in days long ago. But structures for which the windmills in the days of our grandfathers served as prototypes are becoming symbols of technical progress today.

Indeed, wind power generation installations correspond in the best possible way to the demands made of the current sources of electricity. This relates to the complete ecological safety of such installations first of all. No harmful discharges into the atmosphere and not one square meter of flooded land, not to mention the other more serious consequences of the operation of "traditional" electric power stations. They realized this in other countries long ago, especially in countries which are vigorously fighting against environmental pollution. Then why are wind generation installations still considered a kind of wonder here, or else a technical indulgence?

I think our usual predilection for things gigantic, the notorious "scope," and the disregard for what may seem to be trivial are at fault to a large extent. Yes, the capacity of a nuclear reactor or a TETs is not comparable with the indicator for the domestic windmill (or even the foreign one). On one hand, 1 million kilowatts, and on the other hand, from 4 to 30 kilowatts—precisely such wind generators are being turned out by the "Vetroen" Scientific Production Association of the USSR Ministry of Land Reclamation and Water Resources. And discussions about the advisability of developing wind power technology end with this as well—the scales, they say, are not comparable!

Of course they are not comparable. Although Swedish scientists, for example, have worked out a plan worthy of implementation in a larger power as well: not far from the coast, on the Baltic, 300 gigantic windmills will be erected. Two-bladed propellers with a swing of up to 80 meters will be mounted on 90-meter towers. The cost of building the first 100 such giants will amount to about a billion dollars, and the entire system, which they estimate will take 20 years to build, will provide for more than 2 percent of the electricity generated in the country today. But this is in Sweden, which, as we know, plans to shut down its nuclear reactors, and is displaying an interest in nontraditional energy sources that is quite understandable.

One of the developers of the Swedish project noted in a REUTERS interview that wind power technology does not promise to solve all his country's problems. "But even a little help is always good," he added. In his words, it is the key to understanding the role of wind power in the overall energy balance. More and more improved wind generation systems are being developed in the West precisely for the "little help." The locations contemplated for operation of the installations are the farms, rural cooperatives, and small settlements. Development and production of the windmills have become a profitable business in the West. Specialized journals (three are being published in Denmark alone) show the latest models from Dutch, American, and West German firms which are not in the least inclined toward "indulgence" in the technical area. Even in "crowded" Europe, there are a great many places where the use of wind power systems is simply necesary. What does this say about our open spaces, about those numerous villages where the question is not what is ecologically clean—there is no electricity at all.

We should roll up our sleeves here. Especially as the comrades from the appropriate departments responsible for the development of wind power technology are definitely "for" it. V. V. Yershevich, deputy chief engineer of the "Energosetproyekt" Institute, responding to a question about the prospects for wind power technology in our country, said that wind is the simplest to use of all the alternative sources. "We have truly boundless areas to expand the wind power installations, such as the entire North of the Asian part of the country," Viktor

Vasilyevich believes. The objective now is only to acquire reliable installations which can operate in these areas. The "Vetroen" NPO [Scientific Production Association], which is involved in their development and production, cannot offer anything similar to the Western models yet. There are a great many reasons for this, as always, and they are all objective ones. But the main reason for our lag probably lies in our disregard for wind power technology, all the same.

The wind helps man, and its help can be quite significant if we approach this matter in a state manner and overcome the departmental barriers to development of this promising field.

So who will help the wind?

Energy Club Being Formed, Foreign Representatives Expected

18220066a Moscow IZVESTIYA in Russian 28 Feb 89 p 1

[Article by Ye. Tipikin under the rubric "On the Events of the Week": "An Energy Club Being Created"]

[Text] A constituent conference—in which it is expected that power engineers from 20 countries will participate—will open in Moscow on March 1.

In recent weeks the newspapers have been abounded with reports on the creation of various societies and associations. And now another one should appear—"global," "informal." Why and what for?

The development of power engineering has encountered unforeseen difficulties worldwide. It is clear that both the quality of life and the rate of economic growth depend on the level of it. But to what extent? According to the stereotype which has predominated, it was felt that every percentage point of growth in social income corresponds to a percentage point increase in the consumption of power and energy resources. Only the energy crisis of the 1970s and 1980s called that into question. It turned out that industrial development in the developed countries could take place even with reductions in energy consumption. Life thus (how many times!) came into contradiction with "dry" theory.

Disappointment also awaited scholars in the realm of forecasting. The price jumps for oil, the speculative frenzy surrounding resource-conserving technologies, the rise in mistrust in nuclear power and the opposition to its development, as well as all of traditional power engineering in general, proved to be unforeseen. Mass awareness, outstripping the capabilities of science, rushed to the extreme and demanded the immediate halt to construction of all thermal and hydroelectric power plants and the complete conversion to ecologically clean sources of power, which are still often not very efficient.

The obligation of professionals in such a situation is to develop reasoned evaluations of the ecological and social cost of energy. That will evidently be the basic direction of the activity of the Moscow Energy Club. Those participating reserve the right to support or repudiate the methods of power supply being proposed to them.

It is planned to attract the most major power-engineering scientists and eminent public figures to participate in the new association, those who have sufficient weight so that their voices can be heard at the highest governmental and inter-governmental levels. A club is the most suitable form for the communion of people if they want to achieve complete freedom of discussion. The union of specialists, not connected by any official relations, should be a reliable guarantee against the appearance of group interests.

There are ideas for the club to prepare papers on the topics "Power Engineering and Ecology," "Power Engineering and the Latest Technology," "Power Engineering and Social Progress" and "Power Engineering and Economics." Many prestigious organizations and firms have expressed a readiness to finance the club's research. The organizing committee, however, does not want to bind itself with any concrete financial obligations. The range of members of the club is also such that research could be organized where necessary without outside assistance.

It is possible that the club itself will provide incentives or finance the performance of scientific research in selected areas and will develop recommendations for governmental bodies in charge of issues of energy policy. It is possible that the discussion will also concern the formation of a world power system. (This is one of the topics projected for discussion at the club.) We will be receiving exhaustive information in several days. The presence of representatives from 20 countries is expected at the constituent conference.

Radioactive Nuclide Emissions by Ignalina AES Assessed

18220066b Vilnius SOVETSKAYA LITVA in Russian 11 Jan 89 p 4

[Article by Ignalina AES engineer Viktor Pletnev: "A Week at the Ignalina AES"]

[Text] The senior radiation-safety monitoring engineer of the Ignalina AES [nuclear power plant], Viktor Pletnev, talks about the radioactive nuclides released into the atmosphere by the electric power plant.

The editors of the newspaper put out at the Ignalina Nuclear Power Plant, "The Peaceful Atom," inform us that from January 2 to 8 the emissions of radioactive substances into the atmosphere comprised: inert radioactive gases from 11 to 17 percent of the allowable norm (AN), long half-life radionuclides 0.2-3.3 percent of the

AN, and iodine-131 1.7-16.7 percent of the AN. The background gamma radiation in the village of Snechkus was 9-11 microrentgens an hour.

The second turbogenerator of the first power unit was shut down on January 3 due to flaws detected from the electric-power networks. After the elimination of the defects, the turbogenerator was hooked into the grid on January 6. The second power unit operated in stable fashion with an average electrical load of 1,250 MW [megawatts].

Various maximum allowable emissions (MAE) of each radionuclide per year are established for every nuclear power plant in our country. They are coordinated with the USSR State Committee for Hydrometeorology. It is taken into account that the concentration of radionuclides beyond the bounds of the health-safety zone of the power plant not exceed the maximum allowable concentrations (MAC) stipulated by the radiation-safety norms in setting the MAE. Also taken into account are the source of the emissions and the meteorological conditions (height of the stack, diameter of its opening, temperature, speed of the gases being released, prevailing direction and speed of the wind and other factors).

Due to the radiation occurring naturally in nature—natural radioactivity—a person not living near an AES, according to data of the UN Committee on the Effects of Nuclear Radiation, annually receives a dose of radiation equal to 0.25 rems. If a person breathes air in which the concentration of radionuclides is less than or equal to the MAC, then over a calendar year the human organism will receive an additional 0.5 rems. Over 70 years this will not harm his health, and the organism will not undergo any changes due to it.

The health-safety rules for the planning and operation of nuclear power plants, by which we are guided as well, indicate even lower allowable emissions (AE) of radio-nuclides. These rules say that residents at the edge of the health-safety zone of a power plant cannot receive more than 0.2 rems over a year, i.e. just 4 percent of the allowable dose indicated above.

Controversy Rises Over Rogun GES Construction 18220063a Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 2 Feb 89 p 2

[Article by V. Yurlov, Dushanbe, under the rubric "Follow-Up": "Rogun-Style Passions"]

[Text] Our newspaper published the article "The Most, the Most, the Most..." on the construction of the Rogun GES [hydroelectric power plant] in Tajikistan that was written by Candidate of Economic Sciences M. Burkhanova on 7 Sep 88. In analyzing the technical design for the plant from a critical position, the author poses the question of the necessity of a repeat expert environmental

analysis. The feature elicited a large stream of replies. The editors offer two of them, as well as the commentary of our own correspondent, for the readers' attention.

From the official reply of Tajik SSR Gosplan:

A shortage of electric power that will total some eight billion kilowatt-hours [kWh] in 1995 and 13 billion in the year 2005 will arise if we reject the construction of the Rogun GES. It does not seem possible to cover those losses through the Unified Power System of Central Asia, since that power system itself is experiencing shortages.

The reduction of the elevation of the dam for Rogun by 50 meters, as is being proposed by M. Burkhanova, will reduce the rated capacity of the plant by 1,200 MW [megawatts]. The necessity of constructing a thermal electric power plant arises in that connection, which will significantly worsen the ecological situation in southern Tajikistan. The hydro project will lose entirely its perennial function as a waste-water regulator with a reduction of 50-80 meters in dam height, and it will be at borderline effectiveness as a power facility. The useful volume of the reservoir declines therein by more that triple, while electric-power output goes from 13.6 to 10.8 billion kWh. Some 1.1 billion kWh of additional output are moreover lost from GESs located below in the cascade—a total of 3.6 kWh.

The Rogun GES is the "most" only in the height of the dam; in other parameters it is far from "the most." In the volume of the dam in particular—ninth in the world; in rated capacity—15th. This GES will be ordinary among those plants that have been or are being constructed abroad.

The reservoir of the Rogun GES is being created in a highly seismic region and is formed of rocky soil. This will not lead to a rise in the force of the maximum possible earthquake, but rather will facilitate the more equal relieving of stresses over time.

The plans for the Rogun GES have completed expert ecological analysis by USSR Gosplan. We do not feel that a second such analysis would be expedient. The government of the republic and USSR Minenergo [Ministry of Power and Electrification] have at the same time interceded with the USSR Council of Ministers to consider the possibility of reducing the elevation of the reservoir of the Rogun GES with the retention of the basic dimensions of its structures and the economic efficiency of the hydroelectric power plant as one measure for ensuring the guaranteed target influx of river water into the Aral Sea. The USSR Council of Ministers has charged USSR Gosplan and USSR Gosstroy [State Construction Committee] with reviewing these questions.

From the letter of a group of scientists:

The wasteful spending practices of USSR Minenergo and USSR Minvodkhoz [Ministry of Land Reclamation and Water Resources] completely ignore world experience. The implementation of designs for extensive development born in the times of stagnation and inflicting great harm on nature and the country's economy is continuing. Against a background of world trends in the development of electric-power engineering aimed at the utmost utilization of non-traditional and ecological types of energy (wind, solar, biological etc.) and the construction of small and low-capacity but fully automated plants, the "hydromonsters" born in the bowels of Minenergo are production complexes of particular ecological danger. This is leading to the destruction of the country's natural riches and the squandering of scarce state material and financial resources.

The Rogun GES is striking an additional appreciable blow to the Aral, the tragedy of which is connected with the regulation of the outflow of rivers in the region and the creation of reservoirs for high dams. The measure projected by party and government decrees to save the Aral Sea envisage the more efficient utilization of natural river outflows. The Rogun reservoir takes another several billion cubic meters of water from the Aral Sea.

We feel that the construction of the Rogun GES in its existing version should be deemed intolerable. We fully support the author of the feature uncovering the gross errors in planning due to the superficial conduct of surveying operations. The construction of the GES must be halted immediately and possible reductions of 70-100 meters in the height of the dam analyzed, which will make it possible to reduce markedly the negative economic and social consequences. An additional expert ecological analysis should be organized immediately at USSR Goskompriroda [State Committee for the Protection of Nature] with the organization of the necessary research at the scene.

[Signed] M. Lemeshev—chairman of the section for economic problems in the socialist utilization of nature of the Academic Council of the USSR Academy of Sciences, doctor of economic sciences, UN expert on the environment; A. Nekrasov—doctor of technical sciences; B. Vinogradov—doctor of geographical sciences and professor; K. Dyakonov—doctor of geographical sciences; N. Matrusov—candidate of geographical sciences; K. Kivva—candidate of geographical sciences; I. Volkova—academic secretary of the section for the economic problems in the socialist utilization of nature of the Academic Council of the USSR Academy of Sciences.

Commentary by our correspondent:

The name of the little-known village of Rogun was first glimpsed on newspaper pages at the beginning of the 1970s, when the development of the concept of the cascade of Vakhsh hydroelectric power plants was being

completed. The idea is briefly this: regulate the turbulent Vakhsh along its whole length. Tajikistan, second in the country in reserves of hydro power resources, would thus automatically become an electric "mecca."

The most brilliant page in this concept was the construction of the Nurek GES, which until recently was called Brezhnev. The next should be the Rogun GES, surpassing its elder sister in all parameters. Its six units of 600,000 kW [kilowatts] each, according to the calculations of specialists, should justify the colossal funds expended on its construction—over a billion and a half rubles—in 5-6 years. The 355-meter dam, the highest in the world, will hold back the pressure of 13 billion cubic meters of water.

In Central Asia, they say that life is where water is. The design of the Rogun GES envisages that 300,000 hectares of land will be irrigated and the water supply to some 4 million other hectares will be improved through the reservoir. And this will, in the opinion of the planners, provide profits of 2.5 billion rubles. So it stands to reason that the construction of the power giant will have a great impact on the growth of crops and the development of the social sphere of the republic.

Not a single construction project in our country has been thought up to harm the people; the grandiose size of the plans is equated with a growing amount of benefits. The Rogun GES is no exception in this sense. And only time will put everything in its place, separating the actual results from good intentions. There have been, however, unfortunately no few lessons already, not everything is for the better.

A debate on the article "The Most, the Most, the Most..." was held on November 17 of last year in the Writers' Hall of Tajikistan. Among those taking part were scholars who were not at the discussion at TaSSR Gosplan. There was sharp discussion, and different points of views were expressed. But the specialists and representatives of the public were unanimous on one thing: the necessity of a repeat expert ecological and economic analysis of the Rogun GES.

The grounds were most convincing.

The earthquake in Armenia, heard in every corner of the planet, was met with particular feeling in Tajikistan: they know the force of underground calamities by more than hearsay here. The Khait earthquake of 1949 wiped a whole city off the map, and some 30,000 people perished. The Rogun reservoir will coincide with the Vakhsh fault zone along its entire length, on which Khait stood at one time. An ominous neighbor. And not only on a psychological plane.

The planners decided to outsmart nature and came up with a whole "package" of original solutions that will make it possible, in their opinion, to withstand the confrontation with underground calamity.

"Many things that had caused doubts for me before as an engineer," said GES construction chief N. Savchenkov, "have become completely obvious today. We have absolute reliability. This relates to the dam as well, where thousands of units of all possible types of equipment have been installed. The operators can know at any moment what is going on at every meter."

"And what quake force is the dam rated for?" I asked Nikolay Grigoryevich.

"Nine. That is sufficient. Since practically the entire plant is underground, the folds themselves will sort of ease the force of the blow."

"And if a force-nine earthquake occurs?"

"The likelihood of such a catastrophe is practically ruled out. The station is in a nine-level seismic zone."

But an associate of the Institute of Geology of the TaSSR Academy of Sciences, G. Achilov, does not share the optimism of the builders. He related that there existed a lake on this spot six and a half thousand years ago. Careful research conducted in recent years has shown that it formed as the result of an avalanche from the Karategin range, when a whole mountain came down into the Vakhsh and covered the river. And later, after five thousand years, the dam was destroyed as the result of some other cataclysm. The lake ceased to exist at the same time. This incident is of more than purely historical interest. It forces us to evaluate in critical fashion the assurances of the safety of the hydro project from the advocates of construction. The catastrophe that the planners and builders do not want to pay attention to has already happened here. Twice! And no one can guarantee that it will not be repeated.

And another instance reported by G. Achilov at the debate at the Writers' Hall. The region for the construction of the GES should be considered a ten, and not a nine as noted in the plans. The difference of a single point could have unforeseeable consequences. There is no dam of analogous class in world practice located in such a seismically active zone.

One of the fundamental questions is the rate of silting of the reservoir. The question of the movement of alluvium in the Vakhsh River has not been resolved either quantitatively or qualitatively, in the opinion of a department chief at the Mathematics Institute of the TaSSR Academy of Sciences, D. Nabotov. We simply do not have either the special instruments or the techniques to draw unequivocal conclusions. And one can judge how far theory and practice diverge by the scale of silting in the reservoirs of the Vakhsh cascade that were built earlier. The head reservoir was silted up by over 70 percent of its volume in just two years, for example. So it turns out that the reservoir that they tie so many hopes to in Rogun will most likely not fulfill them either.

Finally, one cannot fail to take into account one more aspect of the Rogun problem—the social one. The discussion concerns the fate of the 28,000 people that will have to be resettled from where they are now. Some 42 villages and about 7,000 hectares of arable lands will be inundated. And this is in the mountains, where every clump of valuable land was won with peoples' sweat, where a subsidiary plot produces half, or even 70 percent, of a family's income.

"We understand the necessity of building the Rogun GES for the republic and for the development of industry. But two, three or more plants with smaller dams could be built on this river. Can the chase after economic efficiency really be worth more than people? Then who needs it, this efficiency?" This letter to the editors had the signatures of 38 people from the village of Novabad. The representatives of villages sent a letter in the name of the four thousand residents of the Rogun Sovkhoz. They are asking the scientists and specialists to reconsider the plans for the Rogun GES, reduce the height of the dam and reduce the area of flooded land.

The flood zone includes the area of Tajikistan richest in agricultural potential. The medicinal vegetation here could bring health to millions of people and bring millions in profits thereby. It is unforgivable if the excavations of ancient civilizations, which belong not just to the Tajiks but to all of mankind, end up underwater.

The passions surrounding Rogun were recently inflamed with new force after the recent Gissar earthquake. And now the "hotheads" are proposing a halt to construction. A new extreme.

The Rogun GES will be! But not at any price, and with minimal losses. For this it is essential to hear out the arguments of those you don't want to hear. Including those who were speaking at the Writers' Hall of Tajikistan. It is not too late to do this. An entire transcript of the debate exists in Tajik radio. If, of course... it was not destroyed. There are grounds for such apprehensions.

Tajik television showed a feature on this debate. The first secretary of the Communist Party of the TaSSR, K. Maksimov, came to the TV station the next day and expressed his dissatisfaction with the program. The journalists affiliated with its preparation got a dressing-down. And a radio program that had been prepared in Russian never got on the air.

That is how the plot shapes up.

Khabarovsk Kray AES Protested at Meeting 18220063b Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 2 Feb 89 p 1

[Article by L. Smirnov, Khabarovsk: "Measure Seven Times..."]

[Text] A meeting of kray leaders and specialists of USSR Minenergo [Ministry of Power and Electrification] and academic institutes with representatives of the public

was shown on Khabarovsk television the other day. They were talking about the construction of a nuclear power plant [AES] in Khabarovsk Kray. But how?

Those sitting on the presidium spent the lion's share of the program praising the advantages of the AES over all other types of power-resource utilization: coal, oil, gas, hydro resources. In the words of the speakers, all of the natural wealth of the Far East region has been depleted, and thus there are no alternatives to the construction of an AES in Nakayskiy Rayon on the Amgun River.

This position elicited tempestuous indignation in the audience.

"If everything has been decided from above, why are we gathered here?" the same question was asked repeatedly.

What dispirited them? It was evident from the statements of the speakers from Moscow that they did not have a profound mastery of the situation. And they thus became flustered when questions of other than a general nature were posed, when considered and reasoned answers were demanded.

"Has the construction of the AES been balanced with the erection of the facilities of future consumers of power from the AES?"

"What will all of the construction cost?"

"Won't the AES prove to be economically unjustified if it is recouped many years later after the start-up of operation?"

Nothing was left for those on the presidium except to promise that answers to these questions would appear as seen as a decision was made on the construction of the AES. This elicited an agitated reaction once more:

"Wouldn't it be better the other way around—first give exhaustive answers to yourselves and the public, and then decide whether or not to build the AES?"

A reasonable desire, in my opinion.

'Greens', 'Reds' Debate Issues of Nuclear Power Stations

18220113 Moscow NTR: PROBLEMY I RESHENIYA in Russian No 7, 1989 pp 1, 7

[Article by V. Pokrovskiy: "Passions About the Nuclear Power Stations"]

[Text] The second meeting of the nuclear physicists' debating club was held on 23 March in the DK [Palace of Culture] of the Nuclear Power Institute imeni I. V. Kurchatov. The first meeting, which was held a month or two before, could hardly have been called a discussion: the "greens" did not speak there, although they had been

invited, and specialists had to convince specialists that nuclear power engineering is not so bad, generally speaking, and mainly that we will not get anywhere without it.

But there should have been a dialogue. Perhaps this dialogue took place for the first time at the second meeting. Both the "greens" and the "reds" (this is what the nuclear physicists call themselves—evidently because of the color of the "Danger - Radiation!" sign) of various shades spoke for 5 hours.

The "bright red" director of one of the AST's [possibly: aerogeophysical stations] under construction was there—stabbing the air every second, he shouted into the microphone about the need to take steps against the "greens" without delay. There was a woman from the "bright greens" who began a discussion about the Crimean AES. She charged a great deal and passionately, though she was not heard—through her own fault. Along with accusations that were quite plausible, she larded her speech with passages which drew laughter. For example, she tried to convince those present that "hundreds of stations" are being shut down in the United States, and "someone" had copied this figure from KROKODIL for her. She demanded an explanation why "eight rules of the IAEA" are being violated in building the Crimean AES, but she was unable to say what the "eight rules" were.

Concluding the debates on the construction of the Crimean AES, Academician Ye. Velikhov described the work of the commission which verified the seismicity of the area where the station is being built. The commission, in his words, came to the conclusion that the seismicity here should be rated not at 7 points as before, but at 9 points (plus one point for flooding), whereas the entire plan for the station had been calculated at the first figure. At the same time, the commission, which was compelled to evaluate the seismicity "at its maximum," with a margin, noted the low reliability of its own evaluation—a more precise determination of the seismic danger was prevented by the imperfect equipment, the poor knowledge of the seismic history of the Crimea, and so forth. For this reason, a competition among the Western firms concerned with the seismology and construction of the AES was announced. The two firms which won it are now conducting seismological investigations in the construction area and are verifying the accuracy of the planning solutions. Under the contracts, they will present their conclusions to us in a year, and then the fate of the Crimean AES will be resolved once and for all.

Basically the others who spoke expressed more moderate views, seeking dialogue and mutual understanding. They not only attempted to gain an understanding of the substance of the mutual claims but to determine a rival's position and to understand the nature of the opposition between the "greens" and the "reds."

Just what kind of people are they—the "reds" in the eyes of the "greens" and the "greens" in the eyes of the "reds?" A partial answer was provided by psychologist A. Asmolov.

In the eyes of the "greens," the nuclear physicist is a sexless creature without national substance who is concerned only about his technologies and does not think about people at all. It may be added to this characterization that he is motivated exclusively by departmental interests, and that for their sake this creature is prepared for lies, the loss of scientific reputation, and even ecological suicide. In a word, there is not a grain of trust in the "reds," and they dream only about deceiving us. (I make no secret that I have deliberately exaggerated Asmolov's definition—I hope not a great deal—for a more accurate understanding of the opposition which has developed).

Unlike the "reds," who are sensibly assessing the situation and trying to avert trouble with the methods available, the "greens" are waiting for a miracle, in Asmolov's opinion. They have a totally different consciousness, completely different axioms. They are absolutely and uncompromisingly opposed to nuclear power, and regardless of the consequences, they demand that it be completely banned. They are not interested in the alternatives. When they are asked what will replace the AES's, they suggest what was rejected a long time ago, and when they are told that this was rejected, they either do not believe or hear it.

At A. Asmolov's request, this experiment was conducted in a number of suburban Moscow kindergartens. They gave paper and a pencil to children 5 or 6 years old and asked them to draw their idea of a nuclear power station. All the drawings had black colors, and many missiles and bombs bristled on all sides. Even in the five-year plans the nuclear power stations are associated with fear and cold. The same experiment in France yielded a completely different result—the children drew flowers and the black color was hardly used at all. A. Asmolov believes that while there was a hunt for witches long ago and a hunt for enemies of the people in recent times, we can expect a hunt for the "reds" in the near future. Nuclear physicists, he said, are the potential "witches" of our time.

There is a measure, and even a substantial measure, of truth in the psychologist's words, but after him I. Garasevich, a doctor from Nikolayev, asked to speak and made certain corrections to the characterization of the "greens." "I am not opposed to nuclear power engineering," he said. "I am against imperfection in the technologies for it. I am against the kind of nuclear power stations we are building and how they are being built." He presented the meeting with a list of rules, laws and agreements being violated in construction of the Southern Ukraine AES: these include sanitary rules in the planning, construction and operation of reservoirs, requirements for the siting of the AES, the warter code of

the UkSSR, the timber code, and even the Fifth International Convention on Trade in Wild Flora and Fauna. Garasevich demanded that more economical, more improved technologies be introduced, and what is very important, that the technologies that already exist for accumulating and separating energy be introduced. He presented the scientists with suggestions from specialists in the city of Nikolayev, and it appears that they will give these suggestions the proper attention. The inadequate technologies and the continuous violation of rules, not the prejudices—this is the real barrier that nuclear energy is running into in its procession, which is not a triumphant one today.

I. Garasevich had brought 200,000 signatures from Nikolayev residents to Moscow with the demand that construction of an AES in a canyon on the Southern Bug River be stopped. In particular, he expressed bewilderment: in the November 1987 issue of the journal ATOMNAYA ENERGIYA, it was reported that 90 percent of the power obtained at the Southern Ukraine AES is sent to Romania and other socialist countries. "And we have to pay for this with our Southern Bug?!" he said.

We would not have begun to accentuate readers' attention on this part of the discussion, especially as the "greens" are often mistaken, as experience shows, but none of those who spoke subsequently refuted the Nikolayev doctor's report, and no one answered him seriously. Though one of his opponents accused I. Garasevich of localistic tendencies, and another noted didactically that "we should not forget the importance of our commitments to our neighbors." This cannot be a satisfactory answer.

We did not discover a reference to 90 percent in the journal cited, but we came across the article which I. Garasevich evidently had in mind (B. Kuvshinnikov, A. Petrosyants, and B. Semenov, "The USSR's Experience in International Cooperation in the Peaceful Uses of Nuclear Energy"). It states:

"Certain CEMA countries are taking part in building an AES in the USSR's territory on a compensatory basis. Participation by Hungary, Poland, and the CSSR in construction of the 400-megawatt Khmelnitskiy AES on the basis of agreements concluded in 1979 is a typical example. Under the agreement, after the first unit of the AES is commissioned, the USSR will provide electricity for these countries for 20 years in the amount proportionate to their contribution to the construction. In this connection, the amount of electricity provided annually to the countries that took part in the agreement as of 1990 will be equivalent to the commissioning in each of these countries of an AES power unit with a capacity ranging from 400 megawatts (in Hungary) to 1,000 megawatts (in Poland).

"The Southern Ukraine AES is being built through the joint efforts of Romania and the USSR in the territory of the Soviet Union; electricity from the AES is provided to

Romania and Bulgaria over specially built power transmission lines. More than half of the capacities installed in this AES will provide for the export of electricity equivalent to the construction of three units from a VVR-440 [water-cooled power reactor] in Bulgaria and two such units in Romania.

"Such an approach to cooperation in the construction of an AES has its advantages: it substantially extends the opportunities for selecting a site for the AES, and it relieves the country which receives the electricity of the worry (the emphasis is mine—V. P.) associated with operation of the AES, including the deliveries of fresh nuclear fuel, the storage, transport, and processing of spent fuel, and the reprocessing and burial of radioactive waste."

These are the "advantages" they offer us! We associate ourselves with the concerns and bewilderment of the doctor from Nikolayev, and we hope to receive a satisfactory answer from individuals competent in power engineering to the questions: "What is the ecological situation on the Southern Bug River with respect to construction of the AES? Who is it being built for? Has the power engineering policy changed in this regard since 1987 and will we be continuing to entice our neighbors with the 'advantages' of such cooperation in the future?"

As a result, it became clear that the "greens" fear further development of nuclear power because in their opinion, it will lead to the next ecological or radiation Chernobyl. For this reason, it must be banned immediately. The "reds" are less afraid of a Chernobyl, they do not see an alternative to nuclear energy in the coming decades, and they predict an unprecedented shortage of energy if it is rejected. Our civilization has not yet experienced disasters of this type, and for this reason they do not seem so terrible at present. But it is possible that this would be a little worse than Chernobyl.

A. Makarov, corresponding member of the USSR Academy of Sciences (you were able to read the conversation with him in NTR No 4 of 1989), expressed the fear that the closing of the Armenian AES may lead this fall to extensive complications in supplying power to the Transcaucasus. After stipulating that these are his own assessments, he stated that the situation can turn out to be even more serious than in Siberia in 1983. At that time, because of the imbalance in regional power engineering policy and because of the strong bias toward construction of hydroelectric power stations and the complete rejection—for 20 years—of new thermal power stations, they had to close down many aluminum enterprises and restrict everyday energy consumption, particularly by turning off street lighting in city rayons. In the Transcaucasus, in A. Makarov's opinion, the situation may turn out to be even more serious: there are relatively few industrial enterprises there, and for this reason the main burden of energy regulation will lie on the shoulders of the population. The power adjustments now under way have been called upon to alleviate the blow, but very little time remains to implement them—a few months.

Incidentally, we still do not know all the consequences of Chernobyl. It is possible that its sociopsychological effect will prove to be more serious than its medical or ecological effect. It is already clear now that faith in the scientist and the correctness of his judgments was lost and it is unlikely to be restored quickly. For a society which had information concealed from it for decades and which suddenly came face to face with a disaster which was not possible by any means (we were assured), it is difficult to continue to be just as trusting as before. This is evidently the reason for the extremes in opinions and the mutual hostility. It looks as if the physicists have found the right way to get out of the situation—a debating club for everyone. It is open for any discussions. It will help—at least I hope it will—to overcome

the confrontation between the "greens" and the "reds" and will help both of them to evaluate the situation more accurately.

Not long before this meeting an opponent of the AES's telephoned us in the editorial office. When we suggested that he deliver his protest in the physicists' club, he refused. Why, he asked, should I get into this "wolf's lair." Well, esteemed "greens," the debating club is not a wolf's lair at all, as both meetings have shown. They are waiting for you. They want to listen to you, and not to arrogantly wipe you out, but to hear you and find a common language with you. Of course, your conclusions should be correct and your objections well-founded.

Nevertheless, as we see, there have been enough debates in the club. "We had no opponents in the first meeting," said the permanent leader of the club, Academician N. Ponomarev-Stepnoy. "Now the opponents have made their appearance. We don't have enough of an audience."

Moral Concerns in Search for Material Prosperity Raised

18280098 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 24 Mar 89 p 2

[Interview with A. Kitov, professor, Academy of the National Academy, USSR Council of Ministers, by Yu. Medvedev, journalist]

[Text] Is man's striving for material prosperity good or bad? Are not the cooperative and the lease leading us away from socialism's basic values? These questions are discussed by A. Kitov, professor, Academy of the National Academy, USSR Council of Ministers, a specialist in the area of economic psychology, and journalist Yu. Medvedev.

[Medvedev] Akhmed Ismailovich, one frequently hears that we ourselves are the cause of the queues and the shortages. Our work is far inferior to the work of the Japanese or the Americans. The simplest way out of the situation is to force people to work the way they do under capitalism: to introduce unemployment and to pay more.

[Kitov] That is a delusion that comes from not being sufficiently informed. Unemployment in many developed countries differs significantly from the stereotype that our propaganda has depicted for long years. Frequently this is so-called routine unemployment, when people spend several weeks looking for a new job. Our statistics do not consider such cases at all.

As regards wages, all we have done in the last 20 years is raise them. But it does not feel as if we are working better. Here it is necessary to consider the following detail. The upper limit to wages cannot be set: if you work more, you earn more. But one should not think that the inverse is true: the more you pay, the better a person will work.

[Medvedev] Does not the possibility of high earnings compel people in capitalist countries to give their all?

[Kitov] There is one basic fine point here. Earnings in themselves are not important. It is important to feel that material living conditions depend entirely on the results of one's labor, that a person's labor is the only means of obtaining the creature comforts.

We do not always observe this condition. Much depends on the place a person occupies in the system of distribution relations and on the form of his participation in public wealth. It is also possible to receive little pay but to live better because of one's proximity to various goods than if one were earning big money. As long as this situation continues, no economic levers will be effective.

Look at what the capitalists do. They send an album to the worker's home showing the fashionable things he can buy for every member of his family. They even advise him what he must do to buy all these things: expand the service zone, upgrade his skill level, master a new occupation. Thus a certain psychological situation is created: not only the worker but all his family members are reminded how much their personal well-being depends on the breadwinner's labor efforts.

This instills in the worker the feeling that he is the master of his material conditions. Of course, it is very pragmatic but everything begins with it. Authority, prestige, and spiritual interests emanate from it. We sometimes contemptuously call those who think a great deal about material prosperity philistines. We forget that without this elementary beginning we cannot have all the rest.

How can one be the master of a plant or a kolkhoz if one is not the master of one's own material conditions—if no matter how you work, you live almost the same as a loafer? Or when the earned profits of a properly functioning enterprise are taken away and given to a weaker, unprofitable enterprise?

Recall the blow that was dealt to personal and group property by the liquidation of NEP [New Economic Policy]? Before collectivization, the cultured master was supported. He was told: develop yourself! But he was subsequently crushed. This is why many honest people do not believe in cooperatives today. Many of those joining cooperatives are people who want to grab and run.

[Medvedev] When NEP was crushed, when collectivization was carried out, it was thought that the *chastnik* [private trader] was driven out of man, that he was being turned into a collectivist, that he was being brought closer to socialism.

[Kitov] First of all, let us analyze the meaning of collectivism. It is thought that people are a collective if they are gathered together under one roof and if they wear out their trousers in the same office. But in reality, if a peasant is raising calves on his personal plot, if he is technologically connected with the kolkhoz, and if he buys feed and chemical additives from the kolkhoz, he is involved in the collective labor process.

People do not gather together out of boredom. That is secondary. Technological necessity is primary. It takes at least two people to carry a beam.

It is a known fact, for example, that the idea of the kolkhoz, at the time it was established, did not penetrate the peasant's mind. He did not understand why there was a need for public property—after all, there were many who did not even have personal property. But a person must make the transition from personal property to public property not through propaganda and administrative pressure, but under the influence of economic necessity. We bypassed this stage.

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[Medvedev] Today there are many who believe that cooperatives and leases disunite people, that this is a step backward. And they relate to them without particular enthusiasm, to put it mildly.

[Kitov] The goal of the cooperative and the lease is to give back to man his feeling of being a master. That is first. The second is to orient production toward the consumer.

Let us picture this very approximate scenario. I have leased a vegetable store. But the product is not delivered on schedule. I join forces with a driver. Because we are dependent on the peasant, we also include him. But he sees that there is a need for an agrochemist and an economist. Thus originates the collective in which everyone needs everyone else and everyone considers himself the master. And what is also important: the earnings of each of us depend on customer satisfaction.

We pay little heed to the psychological factor in economics. Those who make the decisions see one thing while those who are affected by them, that is, you and I, see something else. But we should always consider beforehand how a new law or decree will affect most people—the consumers.

Economic accountability is now being introduced. I ask those attending courses at our academy: what does it offer? Higher profits and pay. And what does it give the consumer? They throw up their hands. A woman who works at the Ministry of Trade says that our trade turnover is growing. How is it growing, I ask, if stores do not stock the bare necessities? She is surprised: ours is the ministry of trade, not the ministry for supplying the population.

It turns out that the consumer is not part of anyone's concerns and plans. Take Aeroflot, the Ministry of Communications, the Ministry of Railways—everywhere the client is superfluous. More precisely, department-monopolies want to solve their problems at the client's expense.

[Medvedev] But cooperatives and leases lead to the stratification of society with respect to income. Many are concerned about the future of social justice.

[Kitov] There are people who are entirely content to "put in their time" at work and to collect their modest pay twice a month. They are content that everyone live a poor but equal life. This, in their opinion, is socialism. However, the real essence of socialist justice in the economic sphere is very simple: to each according to his labor!

A gifted, hard-working person who gives society more should live better. That we at the same time must guarantee the social protectedness [sotsialnaya zashchinennost]] of those who are less gifted or less physically developed is another matter. But I very much want the

advocates of "barracks socialism" to understand that they stand in lines and have little because they have hung weights on talented people. They must be allowed to reveal themselves. They must be paid their just desserts for their work. Then all society will live better.

Social protectedness, understood as leveling, corrupted people. Our muscles became flabby. We simply forgot how to work. To my way of thinking, perestroyka presupposes the creation of a more intensive and dynamic society. Many are psychologically unprepared for this. Hence the passivity and fear of change.

[Medvedev] You mentioned an album that a firm sends home to its workers. But this imposes a certain living standard on a person. Changing cars every 3 years, trying to keep up with fashion, buying more and more new things—this is like dangling a carrot before someone's nose, compelling him to work and consume more. The endless chase after goods and services swallows up enormous resources. We are planning to catch up with the living standard of the capitalist countries. Does this not mean trailing behind capitalism and getting into the same race.

[Kitov] It is time to cast off our false bashfulness and to finally admit to ourselves that all attempts to circumvent the capitalist school lead to one thing: we will return time and time again to the starting point. We must distinguish between capitalism as a political system that is unacceptable to us and the experience capitalism has accumulated in organizing production based on commodity-monetary relations. Capitalism's experience is the experience that all world civilization arrived at in a certain stage of history. It was not for nothing that Lenin criticized Proletarian Culture which proclaimed the "abolition" of the old culture. In precisely the same way, we must not reject the economic culture that has been accumulated by mankind.

However, we must learn from capitalism intelligently. If only profit and hoarding loom continuously before our eyes, we will inevitably become a consumerist society that many people even in the West are not delighted with. I do not think that we should try to consume the same quantity of goods and services as the developed Western countries. Our main task is the all-round development of man and the more complete satisfaction of his myriad interests. The material aspect is the means, not the end.

Today's quest of things is the result not only of shortages but also internal emptiness and the attempt to fill this vacuum. Man must have a higher goal. One may, for example, study English in order to get a raise in pay or, as in the case of the Sholokhov hero, to be able to talk about world revolution with English workers. Is that amusing? But I assure you that it was specifically the supergoal that raised personal interest to the level of understanding of social needs, which compelled the entire world to admire Soviet man.

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For many years we advanced the supergoal of communism. It is my belief that human psychology was not sufficiently taken into account. First, this goal was too distant and not every person felt a connection between it and his current activity. Second, and this is probably the most important point, it was considered that we would build communism and invite everyone to join us. But communism cannot be built like a building. It, like socialism, must grow in a person.

What can today's supergoals be? I do not know. Perhaps the preservation of man himself and his habitat.

However we should not lose contact with the sinful earth. Queues for the bare necessities, the power of the bureaucrats, the disgraceful service sphere—all this is injurious to human dignity. The all-round development of the individual is out of the question here. Therefore the immediate goal is economic growth and the creation of conditions for the emancipation of man. Matters must be organized in such a way as to stimulate the disclosure of man's abilities, to draw them out of him like an aerodynamic pipe. This also requires that we decisively rid ourselves of our current obsolete stereotypes and dogmatic principles both in the economic sphere and in men's minds.

Conditions For Holding Two Jobs Simultaneously Clarified

18280109 Moscow PRAVITELSTVENNYY VESTNIK in Russian No 6, Mar 89 p 9

[Article by M. Pankin, lawyer: "How To Become the Holder of Two Jobs"]

[Text] "I am a worker and a mechanic 6th grade and I hold an electrician's diploma. I turned to the rayon employment bureau with a question—where is it possible to become the holder of two jobs? They looked on me as being some kind of fool. How is it possible to find a second job?" (E. Khudayberdyyev from the city of Tashkent)

"My husband is a worker attached to the central staff of a Ukrainian ministry. A leading engineer, he knows and loves his work. He was invited to take on a second job in a good 'firm' of another department. We could very much use the additional earnings as we are expecting a second child. But they hinted to my husband that he should concentrate on his principal work and they said that his work is not standardized. How can this be?" (A. Khmelevskaya from the city of Kiev)

Thus, who is authorized to hold down two jobs? What is new in the legal statutes in this regard? A leading specialist of USSR Goskomtrud [State Committee on Labor], honored lawyer of the RSFSR M. Pankin, was asked to reply to these questions:

Life has shown that at the present time, under the conditions imposed by the conversion of enterprises over to the new managerial methods, those who hold down two jobs can further the carrying out of certain types of work for which personnel are not available.

For the purpose of resolving the question concerning the advisability of expanding the opportunities for holding more than one job and eliminating the restrictions established earlier, a large-scale economic-legal experiment was carried out at enterprises in the Urals region over a period of 5 years. Here, all of the limitations concerned with the holding down of two jobs were removed. One positive result of the experiment was that of personnel assignments at enterprises. Still another equally important social effect—augmenting the budgets of families of scanty means.

Taking into account the results of the experiment, the USSR Council of Ministers adopted a number of decrees which authorized the holding down of two jobs (in keeping with the experiment's conditions) in certain branches of the national economy—domestic services, retail trade and others.

On 22 September 1988, as a result of a comprehensive study of the problem, the decree of the USSR Council of Ministers entitled "Work Involving the Holding Down of Two Jobs" was adopted. As is known, the adoption of this decree was influenced by the USSR Law Governing Cooperation. In accordance with Article 12 of this law, manual and office workers are allowed, when not engaged in their principal occupation, to perform work in a cooperative as a member or in accordance with a labor contract, without having to have the consent of the administration at the place of their principal work.

The decree of the USSR Council of Ministers considered some of the more important and fundamental problems associated with the holding down of two jobs. Other questions concerning the working conditions when more than one job is performed by a worker have been resolved in a statute which, in accordance with instructions by the USSR Council of Ministers, was approved on 9 March 1989 by USSR Goskomtrud, USSR Minyust [Ministry of Justice] and the AUCCTU. In addition to these two documents, which presently regulate the work being performed by an individual holding down two jobs, certain other normative documents which have established the peculiarities associated with the holding down of two jobs by certain categories of workers, not reflected in the decree or statute, continue to remain in force. Prior to discussing the principal norms defined in these documents, let us examine the history of this question.

Historical Information

In our country, the attitude towards the holding down of two jobs has never been simple. During some stages it was encouraged and during others it was prohibited. Here a great deal depended upon the status of the labor resources and upon the availability of personnel for normal operations at the enterprises involved.

During the initial years of Soviet rule, the country experienced a critical shortage of skilled personnel: there simply were not enough highly skilled workers, economic leaders, technical specialists, economists, doctors or teachers. Thus the Narkomtrud [People's Commissariat of Labor (1917-1933)], in March 1919, adopted a statute entitled "On Utilizing the Knowledge and Experience of Higher Technical, Commercial, Educational and Medical Personnel During Periods When They Are Not Engaged in Exercises." In September 1919, the SNK [Council of People's Commissars (1917-1946) entitled "The System For Holding Down More Than One Job" was adopted

In 1921, the SNK summarized the operational practice of those holding down more than one job and approved the country's first statute on the "Status of Holding Down More Than One Job" for the signature of the chairman of the SNK V.I. Lenin. In view of the fact that unemployment was rampant throughout the country, it was stated in the statute that "the holding down of more than one job is permitted only when the labor departments lack the required number of specialists," that is, work must be made available first of all for those who are unemployed.

Time passed, the national economy that had been disrupted by the war was restored, old factories and plants were modernized and new ones built and unemployment was eliminated. In this regard, in 1933, the USSR SNK adopted the decree entitled "On Regulating the Practice of Holding Down More Than One Job." It concerned office workers. No provision was made for limitations on the holding down of more than one job by workers.

By the 1950's, all branches of the national economy, science and culture had skilled cadres of personnel at their disposal and so there was less of a requirement for the practice of holding down more than one job. In this regard, the USSR Council of Ministers adopted the decree entitled "Limitations on the Practice of Holding Down More Than One Job in Service" in December 1959. Here the purpose was to completely reject the practice of holding down more than one job commencing 1 January 1961, with the exception of certain categories of workers upon whom limitations with regard to the holding down of more than one job would be imposed by subsequent decisions handed down by the government.

This decree authorized all manual and office workers to hold down more than one job at the same or at another enterprise during those periods when they were free from having to carry out their principal work. Moreover, in the case of a second job carried out at another enterprise, the consent of the administration at the principal place of work was not required. As a rule, each worker can perform on the basis of holding down more than one job

only at one location—at his own or at another enterprise. There would be one exception—for those workers who were authorized earlier to hold down more than one job in several locations. This would include teachers, instructors, tutors, medical personnel and certain other workers.

The concept underlying the practice of holding down more than on job was defined more precisely in the statute: it involves the carrying out, in addition to one's principal occupation, of another type of work for which payment is made regularly based upon a labor contract. Any work carried out in the absence of a labor contract is not considered as falling within the category of holding down more than one job. A list of such types of work is appended to the statute. For example, literary work is mentioned here, but it can be of a different type. The above applies to teaching work which, if the volume is not in excess of 240 hours annually, is not considered as falling within the category of holding down more than one job. This could be the reading of lectures, practical exercises with pupils and others.

The decree set forth norms which would ensure protecting the health of the workers. This included juveniles less than 18 years of age and also pregnant women. Such individuals were not permitted to hold down more than one job. In addition, the leaders of enterprises, jointly with the trade union committees, were authorized to solve those problems having to do with the holding down of more than one job or limiting such work where it pertained to workers in certain professions or positions involving special conditions or work regimes, the additional work of which could adversely affect their health or production safety.

It was for this reason that the holding down of more than one job was limited in terms of time—not more than 4 hours daily or a full working day on weekends. In the case of operations where, because of the production conditions, the daily 4-hour limitation on working time cannot be observed by those holding down more than one job, an agreement can be reached with the trade union committee allowing for the introduction of a summary account for the working time. However, the overall duration of the work carried out on the basis of holding down more than one job, over the course of a month's time, must not exceed one half of the monthly norm for working time established for the particular categories of workers (one half of the normal or reduced amount of working time).

The holding down of more than one job within the limits of the monthly norm for working time can be authorized only for those workers who, on the day the decree was adopted (that is, on 22 September 1988), were performing work on the basis of holding down more than one job with the same work duration being involved. These workers are covered by the general rule when they convert over to other work involving the holding down of more than one job.

In accordance with the statute, junior medical personnel are authorized to hold down more than one job in institutions for public health and social security within the limits of the monthly norm for working time.

In keeping with this same limit, cultural workers are authorized to work on the basis of holding down more than one job in the capacity of leaders of societies (collectives) for independent creativity, accompanists and other specialists of these societies and collectives, in cultural-educational, non-scholastic and other institutes of the club type.

With the permission of the union republic councils of ministers, the doctors in some regions where there are doctor shortages are allowed to hold down more than one job in institutions of public health and social security, within the limits of the monthly norm for working time for the respective positions.

The wages for those holding down more than one job are paid for the actual work performed within the amount of time established for them and no limit is placed on the maximum amount. When establishing standardized tasks for those holding down more than one job and working on an hourly wage basis and technically sound norms, the payment is made in accordance with the final results for the actual volume of work carried out, regardless of the duration of the time in which the tasks were carried out. In the process, use is made of other wage conditions established for the appropriate categories of workers (for example, bonuses, mark-ups and others). The vacation time for work carried out on the basis of holding down more than one job is authorized to be carried out simultaneously with the vacation time associated with the principal work. The payment for vacation time or the payment of compensation for unused vacation time is continued for those who hold down more than one job and who earlier were entitled to such payments. Here we have in mind those who hold down more than one job, who perform work in working professions and also who work as teachers or instructors at schools, secondary specialized, professional-technical and other educational institutes which are at the same wage level, teaching workers at pre-school, non-scholastic and other childrens' institutes and medical and pharmaceutical workers in institutes of public health and social security.

The duration of the vacation period and the payment for it may not coincide with that for the principal work. This is determined for each work separately. If the vacation time for the principal work is greater than that for a second job, then the same amount of vacation time is provided for this work as for the principal work, but with no wage being issued for that portion of the vacation time which exceeds the paid vacation time.

For example, for his principal work a specialist is entitled to a vacation period of 24 work days and for his second job—a vacation period of 15 work days. In such a case, he is granted a paid vacation for 15 work days for his work carried out on the basis of holding down more than one job and also 9 work days without pay at his request.

In actual practice, a question might arise concerning the possibility of work being performed on the basis of holding down more than one job, during a vacation period granted on the basis of the principal work. The statute authorizes work carried out on a non-work day in connection with the holding down of more than one job, but legislation makes no provision for work to be carried out on the basis of holding down more than one job during vacation time.

A discharge from combined work is also carried out, in addition to the reasons set forth in legislation, if a worker is accepted who is not a holder of more than one job or because of the limitations placed upon the holding down of more than one job in connection with special conditions or the work regime and with no severance payment being made. In the process, the consent of the trade union committee is not required.

An entry in the work information booklet concerning work carried out on the basis of holding down more than one job is made, in response to a desire expressed by the worker, by the administration at the principal place of work.

Unless otherwise authorized by legislation, the working of two leading positions (with the exception of the position of foreman) is not allowed. Such leading positions include positions associated with the management of collectives.

As a rule, a payment for work carried out on the basis of holding down more than one job is not taken into account when computing the average earnings for the purpose of assigning benefits for state social insurance and state pensions—with the exception of teachers and instructors who work in several schools, secondary specialized, professional-technical and other training institutions on the same wage level and other pedagogical workers in non-scholastic, pre-school and other childrens's institutes. When computing the average earnings for these individuals, the wages earned for the actual workload at all places of work are taken into account.

CIVIL AVIATION

Military Aircraft Used to Haul Civilian Cargo 18290161a Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 23 Apr 89 p 1

[Article by Colonel General of Aviation V. V. Yefanov, commander of VTA [Military Transport Aviation]: "Let Us Order a Military Aircraft"]

[Text] (TASS)—The USSR Council of Ministers has approved a decree on the use of USSR Ministry of Defense aircraft to carry cargo for the needs of the national economy. Col Gen Avn V. V. Yefanov, the commander of Military Transport Aviation, tells how this decree will be implemented.

One of the specific results of implementing the current Soviet defensive military doctrine is the extension of opportunities to utilize military equipment and military specialists in the interests of the national economy, and to make use of the fleet of military transport aircraft in particular. They will be carrying national economic cargoes.

I will point out right away that this work is not new for us. Military transport airmen have provided effective assistance to the national economy before. It is enough to recall the catastrophe in Chernobyl and the tragedy in Armenia. Specialists, various equipment, food and medicines were delivered to these regions in a few hours.

We are now faced with the task of organizing and coordinating forthcoming flights with civil aviation. In order to carry this out we are putting 60 heavy transport aircraft, including ones such as the "Ruslan" and the "Antey," into action this year. In addition, the turbojet Il-76 and the turboprop An-12 will be utilized for the needs of the national economy. They can carry vegetables, fruits, and other perishable agricultural products. The shipments will be made under direct contracts with the enterprises and organizations of ministries and departments and the ispolkoms of local soviets in accordance with civil aviation tariffs.

Naturally, we will also provide assistance to Aeroflot in transporting servicemen being transferred to the reserve and young persons being called up for active military service.

Of the funds received in payment for the transportation, 70 percent will be transferred to the state budget. The remaining money will go to cover additional expenses related to these flights.

In conclusion, I want to say that the combat readiness of our units and formations and the professional training and efficiency of cockpit and technical personnel and other aviation specialists will not be diminished to the slightest extent.

Uzbek Aviation Problems, Equipment Shortages Scored

18290161b Tashkent PRAVDA VOSTOKA in Russian 30 Mar 89 p 4

[Report by PRAVDA VOSTOKA correspondent O. Yakubov: "A Ticket Without a Line?"]

[Text] Everyone who rides down Sh. Rustaveli Street in Tashkent sees the empty windows of the building for the Central Passenger Ticketing Agency (TsAVS) of the Uzbek Administration of Civil Aviation. The repair began here several months ago, and the construction workers of SMU-2 [construction and installation administration No 2] of Trust No 8 of "Tashgorstroy" are promising to complete it by May Day. And if they keep their word, the agency will open by the summer vacation season. What kind of season is the current one shaping up to be for us, the air passengers? Last year Aeroflot was unable to provide tickets for 1.5 million persons in our republic alone.

"Yes, the flying season was extremely difficult and irritating last year," says G. Rafikov, chief of the Uzbek Administration of Civil Aviation. "Many complaints were sent to the newspapers' editorial staffs and the television, and people appealed to the administration as well. To the extent possible, we have looked into each specific case, each complaint, but we have not always been able to help. One of passengers' basic complaints is that it is impossible to buy a ticket-you can't stand in line to the end. The situation really became heated to the limit and it was necessary to take the most urgent steps. The TsAVS was built in Tashkent at the very beginning of the 1960's. As an example I will say that the Tu-104 aircraft flew out of the republic's capital once daily. But now modern airliners depart Tashkent's airport every few minutes. The passenger flow is growing rapidly, and we simply have not been in a position to serve so many passengers. Our technical facilities are hopelessly outdated. It is enough to say that the telephone exchange was built as far back as 1949. In order to reach employees on the staff, the ticket agents have been spending up to 15 minutes at times, and even longer. Just a few days ago we finally were able to put a new ATS [automatic telephone exchange] into operation and the long-awaited "Sirena" system has begun operation—it is now functioning in the airport ticket offices, in the agency on Pushkin Street, and after repair of the TsAVS it will be operating in the central agency as well."

Employees of the Uzbek Administration of Civil Aviation are confident that the quality of passenger service will be increased and that automation will make it possible to organize the sale of air tickets more efficiently. All the same, they frankly acknowledge that they are still not in a position to meet the demand from people in the republic completely.

They will renovate the agency and there will be more ticket offices. But not enough to remove the lines. Tashkent, with a population of 2 million, needs offices in each rayon in the city, in the densely populated microrayons, at the major industrial enterprises, and in organizations. Aeroflot employees are starting to train ticket agents. But it is necessary that city authorities and enterprise managers show interest in this problem, not just representatives of the civil aviation administration. And of course, it has long been high time to consider the fact that Tashkent needs a modern facility for ticket sales and passenger registration that meets all the technical requirements. It is clear that this problem cannot be resolved in a day, but the longer a solution is delayed, the more insoluble the problem itself becomes from year to year.

Of course, steps are being taken to improve passenger service. In Termez, for example, they have introduced a system of advance written bookings for air tickets as an experiment. It may make sense to try this system throughout the republic. There is no question that it will relieve the ticket agents, and consequently "Sirena" will reduce the lines as well. But after all, far from everything depends on the ground services.

"One day recently an irate comrade telephoned and reproached us: you try to convince us that there aren't enough aircraft, but there are as many as you want standing at the airport," says Yu. Khokhlov, chief of the transport department of the Uzbek Administration of Civil Aviation. "And aircraft are really standing idle. Last year we had an Il-86 and several Tu-154's waiting for engines for quite a long time. There aren't enough motors, fuel, or aircraft themselves."

And I want to say one more thing without fail. As often as Aeroflot employees are reproached because tickets cannot be obtained, the aircraft depart half-empty. They are blaming us for sabotage and other sins here, although the causes are most often partiocularly technical in nature. For example, the airbuses flying to Leningrad and Riga can accommodate only 280 passengers, not 350, for technical reasons. The difference is substantial, and passengers notice the empty seats right away, leading to the most incredible rumors and fantasies. Probably the flight attendants should inform the passengers not only of the flight conditions, but about the reasons for the empty seats as well. And in general so that passengers have as much information as possible. Then there won't be any rumors.

Summer is not far off, as they say. And we want airmen to do everything possible so that we don't waste valuable time in lines for tickets.

Donetsk Airport Security Tested

18290161c Moscow KOMSOMOLSKAYA PRAVDA in Russian 6 Apr 89 p 1

[Report by KOMSOMOLSKAYA PRAVDA correspondent V. Kosyak; reaction by M. A. Dzhafarov, deputy chief of the Airport Operating Conditions and Security Administration, USSR Ministry of Civil Aviation; and editorial staff comment: "How the Guard 'Flew By"]

[Text] Donetsk—The assignment was unusual and let us say frankly, risky—to hijack an aircraft in broad daylight, in view of all honest people... An impossible assignment? However...

The hole in the fence turned out to be quite suitable as a point to get through, which made it possible to avoid explanations to the militia. Well, it was and it wasn't. With an unaccustomed chill, or so it seems, I will now hear a menacing shout behind my back: "Halt, and don't move!" I look about stealthily on all sides. Silence. I gradually become bolder, and with my collar raised, I walk freely down the concrete taxiways. Ten aircraft are in the parking area. One of the aircraft is being boarded. No, passengers are not convenient for me: why have unnecessary noise? Again I walk from one aircraft to another, familiarizing myself with them and "asking the price." Here is a fuel truck leaving an aircraft. There is only one crew member next to the ramp. Just what I need. I walk firmly up to the airman: "Into the cabin quickly!" and right here I pull from my pocket... my identification as a journalist.

Yes, this was only a practical joke. This year alone five persons were detained by transport militia employees on the territory of the Donetsk Airport after they had penetrated the security perimeter through numerous holes in the fence. Last year there 178 such violations. They literally pulled 8-year-old Andryushka Nedrozhayev out of an airplane cockpit, where he was excitedly posing as a pilot. Here they have really arrived, as they say.

After hearing about all this, I set out...to hijack an airplane.

There at the ramp of an aircraft ready for departure, with the pilot and G. Yevtushenko, the acting chief of a detail of the VOKhR [militarized guard] service of the Donetsk Unified Aviation Detachment, we came to the conclusion that it would be child's play for me to hijack an aircraft. Indeed, why shouldn't we agree on this when I am right here at the ramp. In the secure area. Without any permits.

It is interesting that quite recently, on 17 March, a document signed by the commander of the aviation detachment, entitled "On eliminating shortcomings and providing for security at the Donetsk Airport," went to Kiev. It stated, in particular: "At present, inspection of

the condition of the perimeter fencing is conducted every day by the VOKhR service and an entry is made in a special log. Damage to the fencing is corrected in good time..."

Signed and off their mind? Is it precisely this principle that is followed at the Donetsk Airport? But maybe all this was only a chance occurrence and I turned out to be a lucky reporter?

But honestly speaking, this is the first time I have returned from an assignment that was carried out successfully when I was not in a good mood. After all, tomorrow I may be a passenger...

An Authoritative Opinion

M. A. Dzhafarov, deputy chief of the Airport Operating Conditions and Security Administration, USSR Ministry of Civil Aviation:

"So a correspondent penetrated the airport's territory. So what?" I want to ask. The fact that he reached an aircraft without difficulty says nothing more. How, by what means, does he get into the aircraft? Take into account that each crew member has a weapon. Why does a crew member hardly ever use—and one has not used—his weapon in the air? But that is in the air. There are people in the cabin. But on the ground, I'll tell you frankly, I would not want to be in the role of a "hijacker"...

As far as the incident with the boy playing "pilot" in the cockpit is concerned, it is hard to believe, frankly. In any case I will say this: I know nothing about this case. Although information about all violations comes directly to me.

This may seem strange at first glance, but we place the fencing around airports not to protect ourselves from terrorists, for example. But so that animals or vehicles do not pass through airport territory, so that there are no obstacles in the airmen's work.

Here are the figures: in the 9 years beginning in 1980 we have spent 40 million rubles on this fencing!

And finally, the last factor. As you know, many aviation enterprises now have shifted to cost accounting. And accordingly, they are treating money more carefully. But many have begun "saving" in a rather peculiar way: they simply dismiss some of the guards and do not allocate money for development of our "protective" services. And we cannot do anything about this. Independence...

In general, there are many problems. And we will resolve them, of course.

From the Editorial Staff:

We have repeatedly written about flight safety.

Perhaps we are carping? Perhaps we are the only ones disturbed by this problem?

By no means. It is obvious from articles in the foreign press that flight safety is becoming the number one problem on the transport routes in many countries.

Thus, electronic systems with encoded admission cards which should prevent unauthorized access to airport restricted areas will be introduced at the most "complex" and busiest airports in the United States in 1991. Even if these "unauthorized persons" are airport employees who are not assigned to be in one place or another because of the nature of their activity. Implementation of this order will cost roughly 170 million dollars. Aside from this, the strictest order has been issued: all baggage subject to inspection which is delivered by American aircraft in the United States from 103 airports in the Near and Middle East and Europe is to be X-rayed or opened for inspection.

We realize that this is a rather expensive system. But in a country where dollars are regarded no less scrupulously than we regard rubles and they know whether it is worth economizing on safety, they have calculated that all the capital investments will be recovered in full if just one incident which can lead to the loss of 170 passengers and a large-capacity aircraft is prevented in the next 10 years.

We know that our suggestions about reinforcing the protection of aviation equipment, the inspection service and the security service have been mentioned by the various departments concerned in one way or another. Including the Ministry of Civil Aviation, the main one in this matter. We would like to publish a report one day that our correspondent was unable to steal onto an airfield, and especially into an aircraft.

Ministry Conducts Air Safety Briefing 18290146 Moscow VOZDUSHNYY TRANSPORT in Russian 21 Mar 89 pp 2-3

[Briefing given by A. Goryashko, deputy minister of civil aviation, to VOZDUSHNYY TRANSPORT special correspondent under new rubric "Ministry Briefing for 'VT' [VOZDUSHNYY TRANSPORT]": "Flying Without Accidents, Reliably, and Competently"]

[Text] The word "briefing" translated from the English literally means a conference between press employees and representatives of official organs who provide explanations in one connection or another. The newspaper VOZ-DUSHNYY TRANSPORT has asked officials of the ministry and its lead administrations to arrange briefings for our correspondents. Consent has been received, and today we publish the first material under the new rubric "Ministry Briefing for 'VT."

Ensuring flight safety—this is the principal and paramount task of civil aviation employees. Everyone without exception, from the cargo handler and the driver right up

to the minister. But of course, a special role in this is assigned to the flight service, which is considered the crown of work in the sector. What is being undertaken by the ministery leadership to raise the authority of flight specialists, improve the quality of cockpit crew training, and put regulatory documents in order?

A. Goryashko, deputy minister of civil aviation, responds to these and other questiions asked by the "VT" special correspondent at the MGA [Ministry of Civil Aviation].

The sector has now been operating under the new conditions of economic operation for 15 months. This period has been marked by stable fulfillment of the plan. Fulfillment of state orders for the entire range of items that was established has been ensured, and the volume of work has been increased by raising labor productivity. However, there are still many problems we must resolve. The principal ones are improving the organization of flying work and ensuring flight safety. A number of steps have been taken in the sector in recent years to improve the system of Overall Provision for Flight Safety, which is based on a number of directive and normative documents. There is no point in enumerating all of themthey are well-known to the personnel. In our view, the necessary organizational and legal basis has been established for the work to ensure flight safety in the sector.

In implementing the system cited, we have already succeeded in carrying out a number of measures. These include two-stage flight tests with the Tu-154 and analysis of rough landings by heavy transport aircraft; recommendations have been worked out and theoretically substantiated to prevent such landings. Part of the complex simulators for Tu-154 and Il-86 aircraft have been modified for training cockpit personnel under special flight conditions and programs for such practice have been developed. Recommendations have also been worked out to improve the reliability of the Yak-40 aircraft. Airspace organization is being improved in 40 regions, strict flight paths have been introduced in the Mineralnyye Vody Airport area, one-way traffic has been established in 18 airway segments, 14 straightened routes have been introduced, the VOLMET [presumably: weather advisory service] and ATIS [Automatic Terminal Information Service] systems are being increased, constructive steps are being taken to put the Rostov "Strela" system in operation, and so forth.

Last year work was conducted at the GosNII GA [State Civil Aviation Scientific Research Institute] base to determine the actual aerodynamic characteristics of the An-2 aircraft in the agricultural version. Taking into account the characteristics determined on the basis of a mathematical model, an analysis was made of the accidents involving the An-2 in turns. A technical flight conference was held on these materials and a record of the aerodynamic and dynamic characteristics was compiled. All the developments are specific in nature and are being steadily introduced. Similar work is being done with the helicopter fleet.

A creative group has been established to fundamentally restructure the organization and content of regulatory documents. Nevertheless, in carefully analyzing the condition of flight safety, we have to state that as before, we are not completely eliminating serious shortcomings in providing for flight safety in civil aviation, which was confirmed at the MGA Collegium meeting on 22 September 1988; the meeting reviewed the conclusions from analysis of work to implement the CPSU Central Committee decree of 24 September 1985. The ministry's collegium defined the concept of new approaches to ensure flight safety. What are they?

It involves preventive work based on improvement in the investigations of aircraft accidents. Experience has shown that investigations of aviation accidents by local commissions are handled at a low professional level. The desire to defend the honor of "the uniform" predominates. And it is no coincidence that every year the Gosavianadzor [Flight Safety of Civil Aviation Commission] returns a large number of cases to the ministry for further investigation for this reason. The decision has therefore been made to establish an investigation organization department under the MGA Main Inspectorate; it will be staffed with highly skilled specialists capable of conducting purposeful preventive work and summarizing the results of the investigations of specific aviation accidents.

A harmonious and efficient system of scientific support in organizing flight and methods work has been devloped. For this purpose, flight methods centers have been established in Ulyanovsk and Kremenchug, and a scientific flight methods complex is being established under the Civil Aviation Academy; their scientific facilities are being developed and experienced specialists are being brought in for flight research work.

We are distressed at present by the organization of this work in the State Civil Aviation Scientific Research Institute and the NETs AUVD [Scientific Experimental Center for Civil Aviation Air Traffic Control Automation]. Judge for yourself: 25 departments in the GosNII GA are working on an aircraft, 17 departments are working on the sector's economy and only three departments are working in research on the aviation medicine problems of safety, metrology and standardization, and RLE [expansion unknown; possibly: radar and electronics], and they are concerned with problems of aircraft flight operation.

Problems of ergonomics, the human factor, and simulator training are concentrated in the NETs AUVD. The reduced attention by scientific institutions to the safety problem related to aircraft flight operation has an effect on its condition every year. We need centralization and concentration of forces and facilities here to break the accident rate stereotype that has taken shape. This rests with the GlavULS and the GlavNTU [Flight Service Main Administration and Scientific and Technical Main Administration].

The system of working out the documents that regulate flying work, roughly speaking, functions on a voluntary service basis, which has led to a situation in which documents coming from the ministry are sometimes poor in quality, contradictory, and voluminous. About 400 such documents have already been canceled and the collegium decree "On drafting the structure of normative documents regulating civil aviation flight activity" which has been adopted is being implemented.

The instructor school, which determined the organizational structure of the flight service, in which one instructor was provided for 50 crews, was abolished without grounds by MGA Order No 15 in 1987. We consider the instructor to be the most important person in the sector for training flight personnel, and he bears the responsibility for this. This order is now being reexamined, and we believe that restoration of the instructor's prestige will unquestionably play a positive role now and in the future in improving the professional training of cockpit personnel.

There are also quite a few problems in improving the organizational structure of the crew, where the copilot has hardly any influence on the prevention of an emergency or catastrophic situation in flight, as attested by an analysis of aircraft accidents.

The decision has been made to gradually shift to a crew consisting of the commander and his assistant, with identical professional training and paid identical salaries. Organizational and legal documents are now being drafted and an experiment is under way, after which transition to the new crew structure will be recommended to the administrations, and we hope that in the 13th Five-Year Plan up to 50 percent of the crews will be manned in this way. This will make it possible to use the vast potential of the young copilots, who often cannot become commanders for dozens of years because of the lack of vacancies.

From 20 to 30 accidents take place each year because of the low level of professional training of some cockpit personnel. In our view, the system for training pilots itself is defective. It has long been necessary to instill in personnel the requirement to work independently, as it is done in the airlines of other countries. In this connection, the decision has been made to send cockpit personnel to the UTTs [presumably: Training Centers Administration] for 10 days a year; there they will exchange experience based on discussion, attend lectures on advanced experience in organizing flying work and ensuring work safety, and receive consultations on all subjects in which they are tested.

All the conditions should be developed in the enterprises for independent work; they will be equipped for this with all the necessary flight and technical classes, where under the supervision of a flight detachment engineer the pilot will be trained for tests at the UTTs indpendently. A

similar system will be utilized for air traffic controllers. Working groups are now working out all the organizational problems in this system.

With the aim of improving the level of discipline in crews and the responsibility and authority of the aircraft commander, we have begun to enhance the status of the aircraft commander, and we will have broad discussion on this. We hope that this will contribute to a decrease in that 40 percent of aircraft accidents which take place because of lack of discipline among some cockpit personnel. For more successful preparation to operate new aircraft in Aeroflot with smaller crews (without the navigator), the decision has been made (and it is already being implemented) to retrain some pilots as navigators with further work as navigators to acquire navigation skills. Later on, after 2 or 3 years of work they will be returned as pilots to aircraft where the crew will function without a navigator.

A decision has also been made to develop sectorial standards for services and enterprises in order to stop the tendency noted when enterprises shift to the new economic mechanism—violation of technological processes related to flight safety for the sake of economy. Subsequently these standards will serve as the basis for providing certification for enterprises and services.

It has been decided to establish a Center for Training Crews for Flights Abroad, where thorough training will be provided in the English language, international law, and so forth. After completing this center and receiving a certificate for the right to fly abroad, we think that our crews will be able to represent Aeroflot in foreign countries in a fitting manner.

In order to improve flight safety, considerable work is being carried out to provide the main trans-Siberian route with navigation equipment, the network of airports equipped in accordance with ICAO [International Civil Aviation Organization] Category I and II [instrument runways] is being expanded, and replacement of obsolete radio electronics, radar, and communications equipment is under way...

It is clear that plans to improve the level of flight safety are extensive. I am convinced that their implementation will yield positive results, but for this we need to be imbued with a sense of great responsibility for this most important aspect of work in civil aviation: from the ordinary worker to supervisors of all ranks.

ATC Organization Holds Meeting
18290152a Moscow IZVESTIYA in Russian
8 Apr 89 Morning Edition p 3

[Report by IZVESTIYA's own correspondent V. Razboynikov: "The Air Traffic Controllers Association"]

[Text] Ulyanovsk—The constitutive conference of the All-Union Association of Air Traffic Controllers of the USSR has been held in Ulyanovsk. Its charter was adopted and the tasks and objectives of the new association were defined.

This new public professional organization unites the specialists in the traffic control service of aviation subunits and civil aviation educational institutions on a voluntary basis. It will have a legal status and accounts in the country's credit institutions...

When you become acquainted with the initial documents adopted by the organization's founders, you are automatically surprised that all these questions—from the social to the purely professional ones—are not being resolved by the sectorial trade union for aviation workers. But as it turns out, this sectorial trade union operates in terms that are too general, and much of the air traffic controllers' activity simply falls outside its area of concern. But the problems in the traffic service have been increasing faster than they have been resolved.

Documents affecting the organization of flying work were not well-thought-out. As an example, imperfections in the flight operations manual led to a collision between a Yak-40 airplane and an Mi-8 helicopter in the vicinity of Zheleznogorsk. The circling flight pattern was laid out incorrectly...

The work of air traffic controllers, probably like no other work, requires precision and tremendous tension. It cannot be handled without new technology and equipment. But here the automated airway for the Roston-on-Don Airport has been in the process of introduction for 10 years now...

A firm conviction has taken shape in civil aviation that the traffic service brings no benefit to its ministry; they say it only brings them aircraft accidents. But after all, 35 million flights have been handled and 318,000 tons of fuel have been economized by this very service. The successes have always been mentioned only in passing, of course, inasmuch as the situation in general is disturbing. Over the past year, as an example, there were 16,500 cases of radio electronics equipment failure. Clearly, this was not the fault of the traffic controllers. Analysis showed that elimination of all these shortcomings is possible only when a nondepartmental state system for airspace use and air traffic control is established in the USSR.

Of course, the association considers its main objective to be improvement of air safety. But an important place in its program is held by its social program, legal defense, and development of international relations. A reexamination of the principles in setting standards for traffic controllers' work has ben suggested.

The association intends to shift to cost accounting in the future, but in the meantime it states in its charter that the founders are the Aviation Workers Trade Union Central Committee, the Ministry of Civil Aviation, and air traffic controllers. Its headquarters will be in Moscow. It has decided to begin preparations for its publication.

There is no question that the air traffic controllers are acting in the spirit of restructuring.

Ka-126 Helicopter Undergoes Tests 18290152b Moscow PRAVDA in Russian 11 Apr 89 First Edition p 6

[Report by B. Pipiya: "What Can the Helicopter Do?"]

[Text] Moscow Oblast—The new multipurpose Ka-126 helicopter has come off the production line at the Brasov Aviation Enterprise, which is in Romania. It is being manufactured under an agreement between the USSR Ministry of the Aviation Industry and the Romanian Ministry of the Machine Building Industry. The first series aircraft recently appeared at the international helicopter exhibition in Beijing. Many foreign specialists have become interested in the new rotorcraft and have sought to acquire it. What has been the attraction of the new model?

The Ka-126 is the younger "brother" of the Ka-26. It was designed a quarter century ago in the Soviet Union especially for national economy needs and has proved to be an indispensable helper in agriculture and forestry, in the search for minerals, and in transport operations.

The question of modernizing the Ka-26 was raised practically from the day it was turned out. And then a rotorcraft with a gas turbine engine was developed in the Experimental Design Bureau imeni N. I. Kamov under the direction of Professor S. Mikheyev, Lenin Prize winner and doctor of technical sciences.

They did not let me go up in the Ka-126; in conducting the plant, state, and operational tests, they explained, outsiders, including journalists, are not allowed on board the aircraft. For this reason I asked V. Kasyanikov, the deputy chief designer of the experimental design bureau, to tell about his "creation":

"The exterior of the Ka-126 resembles its predecessor. But only the exterior. The gas turbine engine has a capacity of 720 horsepower. Fuel consumption, and it uses cheap kerosene, not gasoline, is minimal. The aircraft's speed is 180 kilometers per hour. The helicopter has no fear of the cold or high temperatures. The rotorcraft helper can take off vertically from pads located at elevations of 1,500 meters above sea level."

The configuration of the "flying landing gear" makes it possible to install an easily detachable cargo and passenger cabin, a hopper for chemical preparations, and other equipment on the Ka-126. The helicopter can carry six to eight persons and a suspended bulky cargo of up to 1 ton. It has a range of 650 kilometers without refueling.

Unlike its predecessor, the new helicopter weighs a half ton less. The cargo and passenger cabin, the empennage and the rotor blades are made of nonmetallic materials, fiber glass in particular. The metal substitutes simplify the process of manufacturing parts and most importantly, they provide for a longer service life. Composition materials are more durable in different hostile environments, since they are less susceptible to cracks than metal.

An air purification system was developed and installed in the Ka-26 cockpit for the first time in world helicopter manufacturing. It is also used on the Ka-126. In treating agricultural land, chemical fumes can penetrate the cabin of the aircraft. A filter-separator has been installed in the helicopter's nose section. Air free of chemical impurities is continuously fed through it into the cabin.

Experimental tests of the Ka-126 are now under way at an airport near Moscow. The aircraft is being preapred for international certification at the same time. The creation of the Kamov workers should become the basic agricultural helicopter in CEMA member countries in the near future.

Zvartnots Airport Upgraded to Weather Category II 18290152c Yerevan KOMMUNIST in Russian 22 Mar 89 p 4

[Report by K. Vlasenko: "A Present From the Aviators"]

[Text] In accordance with a decision by the State Commission for the Supervision of Air Safety attached to the USSR Council of Ministers, the Zvartnots Airport received a certificate attesting to its suitability for operation under ICAO [International Civil Aviation Organization] Category II weather minimums.

In a ceremonial setting, Ivan Keropovich Mulkidzhanov, the state commission's deputy chairman, presented the certificate to the chief of the Armenian Administration of Civil Aviation, E. Papikyan.

"The airport's readiness to receive aircraft under instrument weather conditions plays an important part in the combination of measures aimed at ensuring flight safety," I. Mulkidzhanov said in his speech.

"In accordance with the long-range program to further develop the network of airports, steps are being taken to renovate and equip them with modern facilities. The Zvartnots Airport, where operations have been conducted under extreme weather conditions and with much intensive use of personnel and technical resources, is one of such airports. The airport's collective has coped successfully with the tasks of renovation by demonstrating firmness of purpose and professional skill. Zvartnots is the 10th airport in the country and the first in the Transcaucasus to receive the right to handle aircraft under such extremely poor weather conditions. This is an important present from aviators to the residents of the republic and the country."

Aircraft will now be taking off when the visibility is 200 meters and landings will be made when the ceiling is just 30 meters and visibility is 400 meters. But taking into account that the definition of visibility in the weather minimums was established when the strong lights in the airport lighting system are used, aircraft actually will be taking off and landing when the true visibility is 100 and 200 meters, respectively. In a word, aircraft will now be flying even when the weather conditions are twice as bad.

The cost of the operations completed and the equipment installed was over 10 million rubles. The runway and the taxiways had to be reinforced and lengthened, all the radio electronic landing and navigation systems had to be replaced, and the "Start" AS UVD [automated air traffic control system] had to be installed. The airport's lighting system was replaced and the reliability of the power supply for the radio electronic facilities was improved. Automatic power backup with triple redundancy was introduced to conform to the special standards of suitability in all navigation facilities for landing and air traffic control. Detailed geodesic charts of all the natural and artificial obstructions in the airport area were made with the help of specialists. The equipment for automatic observation of changes in elements of weather in different parts of the airport was updated and supplemented. An accident and rescue station was built and equipped with modern facilities.

The radio electronic equipment, the lighting system, the power supply and all other facilities related to flight operations underwent a thorough and strict inspection by specialists of the USSR Gosavianadzor [State Commission for the Supervision of Air Safety] (the check was conducted for over 6 months) for conformity with the special standards of suitability. The issuance of the certificate attests to the fact that a difficult examination was passed to ensure higher flight regularity.

Vnukovo Airport Meteorological Center Functions Noted

18290143a Moscow SOVETSKAYA ROSSIYA in Russian 30 Mar 89 p 4

[Interview with Georgiy Afanasyevich Syrkin, chief of the Main Aviation Meteorology Center of the USSR Goskomgidromet [State Committee for Hydrometeorology], by V. Zhilyayeva: "Fog Over the Runway"]

[Text] "Kiev, Kharkov and Kishinev are closed. Paris is open, but I don't have to go there." Everyone knows these ironic lines from the song by Vladimir Vysotskiy. Indeed, we air passengers often blame the weather forecast if it prevents us from departing for the city we need in time. However, few know the details of the meteorological service's work in helping Aeroflot. Just what is flying weather, anyway?

We are in the office of Georgiy Afanasyevich Syrkin, the chief of the Main Aviation Meteorology Center of the USSR Goskomgidromet (GAMTs) at Vnukovo. The center provides service for flights in the Moscow air traffic area. Inasmuch as roughly one-fourth of all Aeroflot passenger flights are handled at Moscow airports, and Sheremetyevo serves 98 percent of the international flights, we can imagine the large volume of data that is gathered in the GAMTs. The center is responsible for the collection and dissemination of meteorological data for flights throughout the country and abroad.

"Our basic job is to ensure flight safety," says Georgiy Afanasyevich. "Not one flight will depart unless the crew does not get a weather briefing. And whether it is flying weather or not, the forecasters do not decide, the airmen themselves do.

"In general these are rather loose concepts. They do not coincide for different classes of aircraft. After all, in some cases weather conditions at lower altitudes are important, in other cases the weather at high altitudes is important. At times the weather at departure and arrival airports is clear, but the weather enroute is poor. The approach zone also may be affected by unfavorable weather conditions. It may happen that everything is fine in the sky, but the runway is icy, and until they get it ready, departures for this airport are not authorized."

[Zhilyayeva] The USSR Goskomgidromet showed us a letter from the International Air Services Central Administration at Sheremetyevo stating that the use of accurate meteorological information makes it possible to take less fuel on board, to spend less foreign exchange for it, and to save about 3 million rubles annually.

[Syrkin] Indeed, the economic aspect of aviation activity depends on the accuracy of our work to a large extent. For example, taking weather forecasts into account—wind direction and speed, temperature, and so forth—helps to reduce the time in flight and to select the best conditions for it.

But there are also problems here. Let us assume if the probability of favorable weather over an entire route is 80 percent and the probability of poor weather is 20 percent, meteorologists would prefer to orient themselves toward this 20 percent, since they are responsible for ensuring flight safety and they are not concerned economically with maintaining flight schedules. The crews, in taking into account that they may be sent to an alternate airport, will take fuel instead of a residual load. To sum up, even if an aircraft lands at its airport according to schedule, the flight will be less economical than if they had carried passengers and cargo instead of kerosene.

[Zhilyayeva] Does this mean that economic losses are inevitable if we are counting on safety?

[Syrkin] No, to a certain extent this is a consequence of certain imperfect weather instruments. Reports on cloud bases also depend on the means of measurement and observation. In general, we can only guess how economically our Aeroflot could operate if forecasting were conducted at a higher technical level.

Though progress is being noted. Recently, for example, the Ministry of Civil Aviation and the Goskomgidromet approved the decision to jointly provide for automation of weather support processes in the Moscow air traffic area during this five-year plan.

[Zhilyayeva] Which domestic airports allow landings and takeoffs under minimum weather conditions?

[Syrkin] The Moscow airports at Sheremetyevo, Domodedovo and Vnukovo, and Pulkovo in Leningrad. They are equipped for international [ICAO] Categories I and II: landings and takeoffs when the visibility is no less than 800 or 400 meters and the ceiling is no less than 60 or 30 meters. But even if an airport is equipped for the highest category, as in London, it will be nonflying weather anyway for an aircraft that does not have the appropriate quipment or a pilot that has not had special training.

[Zhilyayeva] I have had occasion to hear paradoxical things from our aviators. For example, two identical aircraft made in the Soviet Union fly into Sheremetyevo, only one belongs to Aeroflot and the other to a foreign airline. They turn away the former "because of nonflying weather," but the latter calmly lands under the same conditions. How can this be explained if the aircraft are identically equipped?

[Syrkin] This is all related to the different attitudes toward weather forecasts in the world and here. Everywhere those receiving aviation weather reports consider the forecasts as the most reliable, and only the pilot is given the right to make a final decision. Forecasts are taken into account in production activity, but they are not the basis for it. Here, our pilots and aviation ground services are guided by a network in making decisions based on forecasts. Going against the purpose of this document means to assume the responsibility for yourself. It is simpler to follow it as a dogma and attribute losses to nonflying weather. Incidentally, our pilots land their aircraft safely at foreign airports under similar conditions by making independent decisions.

[Zhilyayeva] And do you think that the transition to cost accounting will reinforce the mutural economic interest of aviators and meteorologists in each other's work?

[Syrkin] I believe if the meteorological service had a material interest in the end result of aviators' work in transporting passengers and freight, there would be a certain deduction from the profit and with the present equipment it would have the incentive to make use of all

its reserves to make forecasting as accurate as possible. But at present, Aeroflot is only increasing its demands on meteorologists, without offering anything in return.

This is at a time when our forecasters are not taking anything from aviation for the weather support, although they keep such accounts throughout the world. Both our wages and the cost of the equipment for forecasting the weather at airports—all the material support—follows the line of the Goskomgidromet. Meteorologists have no economic levers to influence aviators today; after all, we cannot refuse future forecasts for Aeroflot in the event it violates any of our conditions, since they are obligated to think about the passengers' safety, and there is only one airline to serve them. These and many other factors must be studied so that the shift of our production relationships to cost accounting is advantageous not only for both sides, but for the entire national economy and all air passengers.

Air Route Changes Noted

18290143b Moscow VOZDUSHNYY TRANSPORT in Russian 14 Mar 89 p 2

[Report from Ministry of Civil Aviation by correspondent L. Bukreyev: "An Economical Correction"]

[Text] Changes are under way all the time in the different areas of civil aviation activity. These changes, in the form of corrections, are being inserted simultaneously in the List of USSR Airways and the Airspace Use Manual.

On 26 March this year, the next new correction in the List of USSR Airways is being introduced with the opening of 15 new segments totaling 2,215 kilometers in the Krasnoyarsk, East Siberian, Ukrainian and Volga Administrations of Civil Aviation. A new international airway from Khabarovsk to Harbin will make its appearance. The range of flight levels used on 10 airway segments in the Volga, East Siberian and West Siberian Administrations will be extended up to 11,600 to 12,100 meters.

A new airspace allocation pattern has been developed and is being introduced under the "Start" AS UVD [automated ATC system] in Krasnoyarsk and Irkutsk. There are 10 airway routes that have been straightened, shortening one-time use of the course by 700 kilometers, and one-way traffic on routes between Krasnoyarsk and Abakan, Krasnoyarsk and Novokuznetsk, and Krasnoyarsk and Kemerovo. Many other changes have been inserted as a correction in the List of USSR Airways.

Employees of the GlavUVD MGA [Air Traffic Control Main Administration of the Ministry of Civil Aviation] are now engaged in coordinating and preparing new corrections to the List of USSR Airways which provide for the opening of international airways and airports on the trans-Siberian route and airways with one-way traffic between Dometsk and Rostov-on-Don, which will make it possible to introduce one-way traffic on airways from

Leningrad to Rostov-on-Don. Many other airway segments and routes straightening them will also be corrected. However, these are fragments compared with what could have been made.

The interdepartmental commission of the YeS UVD SSSR [Unified ATC System of the USSR], and especially its large working staff, established in 1973 after the aviation disaster near Yukhnov, "became rusty" and requires fundamental restructuring. For this reason, the problem of establishing a state organ, independent of a department, which is capable of organizing the country's airspace in a state manner and in the spirit of restructuring and of bearing individual responsibility for this, must be resolved without delays.

MOTOR VEHICLES, HIGHWAYS

Shortcomings of Automobile Industry Examined 18290148a Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 31 Mar 89 pp 2-3

[Article by Albert Valentinov, Moscow; Yevgeniy Temchin, Zaporozhye; Vladimir Noskov, Gorkiy; and Leonid Skoltsov: "The Automobile Today... But"]

[Text] During a recent international exhibit, Japan displayed an experimental model of an automobile in which electronics predominated. The driver merely had to indicate the destination and then sit back on the rear seat. An on-board computer directed the vehicle to the desired location or pointed out the optimum route, with the information being obtained from a communications satellite. The driver was warned of danger in a timely manner and, if necessary, he could take over the controls himself. Add to this an ecologically clean hydrogen engineer and we have before us the automobile of the not-too-distant future. Certainly, the series production of such vehicles is impossible in the absence of a tremendous amount of work, costly studies and radical modernization of production operations. But it is believed that the time is not far off when the world will begin to produce only this type of vehicle and we will have to do so as well.

"But what do you think? What can this point out for us?" smilingly asked the Minister for Automotive and Agricultural Machine Building N. Pugin, during a conversation with our correspondent. And actually, who can point the way for this powerful department? The situation in the country is such that "he who does not have a deficit" orders the music. And you will not find a greater shortage than that which has to do with small automobiles. The price for one on the "black market" is two to two and a half times higher than the state price. The dictatorship of the producers is absolute.

Today we are discussing what is happening or not happening with our automobile builders, when nobody has an edict or decree for them. And by way of contrast—how work is proceeding in those areas where the dictates of the consumers have really become a reality.

Where Is the "Moskvich" Going?

The door, which was polished to a mirror shine, closed noiselessly and I found myself in the cozy and unusually comfortable interior of a "Moskvich-2142."

"This model belongs to the 1991 series," stated the deputy general director of the "Moskvich" PO [Production Association] V. Sokolov.

"In your opinion, is it in keeping with the international level?"

"Quite honestly, the 2142 model brings up the rear."

"And the Present 'Moskvich""?

"Well, it has just now appeared on the horizon.

The evaluation for the publicized domestic super with its stylish "hatchback" body was not too flattering. But it was objective—with the virtues of the super still rather vague. This was clearly borne out by the long lines waiting at the technical service stations. And even more surprising was the fact that there was room for creating the 2141 model. In 1977, the specialists of the then Minavtoprom [Ministry of the Automotive Industry] imposed two analogs upon the ministry: the body of the French "Simki" and the chassis of the Italian "Audiavant." There was no interest in listening to the plant designers who insisted on creating their own domestic automobile. However, in approving this decision, the former minister V. Polyakov, displayed considerable foresight when he pointed out the need for including in the design the "minimal changes needed for distinguishing the latest version from the prototype." Were not these changes brought about by numerous defects?

"By no Means!" the chief technologist V. Fonin protested strongly. "We were simply pressed for time and we were forced simultaneously to plan and build the departments, to design a vehicle and to develop a technology for its production. And expenses are inevitable when such a method is employed."

The references to expenses could only arouse bewilderment. It was quite some time ago that the entire world converted over to parallel planning, which makes it possible to shorten the period of time required for mastering new models and raising their quality. We required 10 years in order to produce an unsuccessful copy of the "Simki-1308," which was recognized as the best automobile of 1976. This gives some idea as to the extent to which our specialists have fallen behind.

"And what did you wish?" asked the chief designer A. Sorokin, somewhat bitterly, "Since the 1950's, our wings have been clipped and the road to creativity closed. International automobile construction has moved forward while we have remained idly in place."

At the present time, it is also difficult to believe that the products of the AZLK [Moscow Order of the Red Banner of Labor Automobile Plant imeni Leninist Komsomol] are not known throughout the entire world. The small elegant "Moskvich" vehicles, created by our Soviet designers and technologists, were awarded medals during international exhibits and won extremely difficult inter-continental rallies. With both surprise and alarm, the western newspapers wrote about this "Russian miracle" when it burst upon the world market. Their concern was in vain. Before long, a period of stagnation set in. The same automobile has been rolling off the AZLK assembly line for almost 30 years. But the chief sadness had to do with the degree to which this stagnant period affected the people. For 30 years the designers and technologists were actually removed from scientifictechnical progress. The principal considerations were lost-professionalism, erudition and the ability to utilize the latest design and technological solutions.

Certainly, they did not sit with arms folded. They worked in a tense manner in the interest of improving the automobile. This was not a paradox. Gosplan, Gossnab and Minfin [Ministry of Finances] took maximum advantage of the absence of competition. In view of the bottomless internal market, the plant was authorized to build only the small rapidly aging "Makiyazh" vehicle. In return, the retail prices were inflated and the funds for metal and other raw materials, resources and wages declined, requiring a reduction in the weight of the automobile and a lowering of its production cost, in order to pump the millions of rubles so released into other branches for filling in the gaps. The consumer properties of the vehicle declined with each passing year.

In analyzing the sources of the crisis, some of my co-workers placed the blame on the short-sightedness of highly placed officials who learned nothing from the inglorious finale to the growth in prices for gold, cut glass and carpeting. Captives of the administrative-command system, they simply were unable to remove themselves from the well-trodden track of "satisfactory" indicators. And history has repeated itself: the "Moskvich" has lost its market. It cannot even be purchased on credit. The need has developed for removing the "Zhiguli" from free sales. And those people who were are unable to register for a vehicle at their place of work, were faced with a dilemma: either remain without wheels or take whatever was available.

An urgent need developed for mastering the new modern model. Was the deficit in time conditioned by the selection of a foreign analog? Or by distrust in our own 30 years of inactive creative ability? In any case, the task turned out to be a difficult one. Indeed, an appropriate

level of production was needed even for copying a finished vehicle. One can imagine the extent to which a plant had been neglected if its re-equipping required 1.3 billion rubles for the production of an automobile which had "only just appeared on the horizon." Last year I wrote that the Izhevsk Automobile Plant required only 230 million rubles for assigning the completely worked out "Orbita" vehicle to the assembly line and that it was unable to obtain this amount. The residents of Moscow furnished considerably more, including currency in the form of credit. No other domestic automobile plant received such generous appropriations. This was enough for solving all problems throughout the entire world: if money is available, there are no problems. Our hardened system of departmentalization had introduced substantial corrections into the classic formula "money and goods."

Together with the deputy general director V. Sokolov, we visited the departments. And by no means was it an accident that Valeriy Nikolayevich began the inspection in the production area, where one would hardly expect to find a chemical department at a machine building enterprise. The equipment needed for stamping, casting and the blowing out of plastic ceilings, instrument panels, fuel tanks and many other units and parts used in a modern automobile as replacements for metal was located in a small area.

"Domestic chemistry has turned out to be bankrupt," explained V. Sokolov. "It has not succeeded, or perhaps it would be more correct to state that it has not wished, to master the finishing materials made from the waste materials of the textile, sewing, cotton and woodworking production operations, which long ago became a part of the arsenal of international automobile construction. But we have mastered this technique."

Is this not a paradox? Throughout the entire world, the integration of production has beyond any doubt proved its effectiveness compared to other economic structures. Yet the automobile plants see no other path for development than a return to the natural economy. But is this really the first instance in our practice?

"But what is to be done?" asked V. Sokolov, with a shrug of his shoulders. "The councils of labor collectives of some enterprises of Minneftekhimprom [Ministry of the Petroleum Refining and Petrochemical Industry] decided that it is unprofitable for them to produce gaskets, seals and other mechanical-rubber products. The prices are too cheap and the costs too high. They propose to supply the raw materials—profitably and with no fuss or bother. Our situation with regard to electronics also leaves a great deal to be desired. And if the state does not credit us with currency, we will be left with no modern equipment: our domestic machine builders have rejected many of our orders.

As you can see, the economic reform has by no means eliminated the dictates of the producer. And we must wait until finally competition appears, an effective market regulator—there simply is not enough time. And it is particularly lacking among the automobile builders, who are encountering some critical problems. Here we have in mind ecology and safety.

The automobile presently constitutes the second global danger following nuclear weapons. If this is an exaggeration, then it is a small one. The poisoning of the planet's atmosphere, the hundreds of thousands of people who perish in automobile accidents and the millions of maimed and crippled individuals—such is the annual cost to mankind for the sake of speed and convenience. But indeed nobody wishes to block the path of this comfort-seeking killer. Technical progress does not look backward and the production of vehicles is increasing. And it will continue to increase. But what kind of vehicles?

Since 1992, the Common Market has toughened the norms for the safety and ecological characteristics of vehicles being employed on roads in Western Europe. This means that our automobiles are not welcome in Europe.

This decision by the Common Market has a direct effect upon the AZLK, which must sell vehicles abroad in order to obtain currency, settle accounts with the state and continue to modernize its production operations. I foresee indignation on the part of those readers who have stood on lines for years waiting for an automobile: the West can manage without our vehicles. True, they can manage quite well. But can we do without them. We need equipment that has still not been mastered by our domestic machine building, we need materials which our domestic chemistry cannot supply us with, we need zinc-chrome metal in larger amounts than our domestic metallurgy is supplying us with at the present time and we need electronics. Our needs are considerable. Thus, a complicated situation has developed: in order to turn over a modern automobile to the internal market, we must first break into the foreign market. And this is a difficult task.

"We need to raise the competitive nature of our vehicle," stated the association's chief designer A. Sorokin. "At the present time, we are selling it in France. A number of other countries are also interested in it. We will not flatter ourselves; our consumers are people with low incomes who cannot afford prestigious models. But for a small price they wish to obtain a reliable and long-serving automobile."

Availability and quality—these two criteria are by no means mutually exclusive. But in order to combine them, the association must change its technical policies radically and completely rule out the use of antiquated methods for creating vehicles.

"Under the existing system, where departmental interests prevail and a state order does not ensure the required degree of quality, we cannot make a modern automobile," stated the deputy general director V. Sokolov. "We must throw off the departmental yoke and create a network of small cost accounting enterprises for the production of individual parts and units—pistons, rings, suspension rods, steering columns and so forth. And if the well-being of the collectives of these enterprises is dependent directly upon the quality of the products being supplied, then they will be forced constantly to improve their production operations and to monitor vigilantly the international level."

But here we essentially have in mind the creation of an effective economic structure which will be completely independent of the administrative-command system and its stiff centralized dictates. And because of this it will be able to adjust flexibly to any changes in the market conditions. The association is presently looking for bankrupt enterprises where new production operations can be started and where agreements can be concluded with cooperatives for deliveries of rubber products, electric equipment and other items. But a large number of problems still remain!

The period of stagnation has been with us for decades. The older and experienced specialists fear the new equipment and do not know from which side they should approach the electronic machines. Even more weak are the personnel responsible for providing professional-technical training. Indeed, even the equipment available at the AZLK is not to be found throughout the rest of the country. Moreover, it is not available in the PTU [vocational and technical school] training classes. In addition, the present "Moskvich" requires a selective selection of parts which of itself assumes a high level of skill in the workers involved. The next vehicles will be even more complicated.

Problems, problems and still more problems. And all of them must be solved, since there is no alternative—the country needs a modern automobile. But can the association cope with this task using its own resources?

"With the passage of time—yes," states V. Kolomnikov. "But we are not the only ones confronted by these tasks—the branch is also involved. And we will not succeed in solving them quickly if the ministry does not lend a hand."

It is believed that the general director has evaluated correctly the prospects for the future. Only properly oriented technical policies, the extensive use of science and a consolidation of all forces and resources will provide domestic automobile construction with a rapid stimulus towards the international level. This was clearly revealed by the example of the "Moskvich" PO [production association], which suffered such pains with the unoriginal vehicle that was created. And indeed, up ahead we can only expect the creation of new and

considerably more improved vehicles. What contribution is the ministry expected to make that will allow our domestic automobile construction to remove itself from the well-trodden tracks? Our discussion with the USSR Minister of Automobile and Agricultural Machine Building N. Pugin began with this question.

"The ministry and I evaluate the work of the plant not on the basis of long-range developments, but rather according to the finished products," stated the minister. "And the plant is still operating poorly. And primarily because of the weak organization of the work. Thus the monthly plan is bogged down."

"Nikolay Andreyevich, is everything here on a monthly basis? I have in mind the future."

"And the future is as such: the plant capability at the present time is 80,000 automobiles annually and the plan—120,000. And all resources must be directed towards fulfillment of the task."

"And how do you relate to the collective's other plans, for example, to the creation of a new economic structure?"

"In a positive manner. Let them go ahead and create it. Only so long as they do not drag it out. It is all too difficult. But if they wish... In short, let them correct the situation with a plan and we will support any of their progressive undertakings."

This then is how our discussion proceeded. Nothing specific, with the exception of catchword phrases. The position taken by the person with whom I was speaking was entirely clear: he was in favor of any innovations, but within a "legal" framework. So long as the foundation was not shaken. And by no means was it my intention to reproach the minister. What could he still say? Indeed, he is also a captive of the system—a rigid pre-eminence of departmental interests aimed at achieving satisfactory indicators—in terms of gross output, nomenclature and assortment.

The international level is not mentioned on this list

Albert Valentinov, Moscow.

Chief Designer

Igor Borisovich Galchinskiy is not a builder, an architect nor a supplier. However, to the extent that I know him, and it is already for a period of 12 years, he has performed these various types of work with startling persistence and considerable talent. Since that time, as the chief designer of the "AvtoZAZ Association, V. Steshenko has persuaded Galchinskiy to work for the respectable and rich VAZ [Order of the Red Banner of Labor Volzhsk Automobile Plant imeni 50th Anniversary of the USSR] "Kommunar" Plant.

I was present during those persuasive discussions and I recall very well Steshenko's arguments: you will be given full freedom of action, the "architecture office" will be in your hands and you will be able to recruit people as you wish—and we will make new automobiles. Upon hearing the word "architecture office," Galchinskiy made a face in the manner of one having a toothache. And on each occasion he corrected the speaker:

"Design Department."

"Correct, Correct," Steshenko agreed. "Everything will be in our hands. Design is design."

Thus, Galchinskiy found himself under a staircase leading to the administration of the chief designer for "Avto-ZAZ." It was here that the "architecture office" was located—a small hall in which work was carried out by moulders, engineers and technicians, all of whom are inclined towards artistic design work. Models had been created here of the "Zaporozhets," "Gorbatyy" and "Ushastyy." The working conditions were bad and the equipment of the most primitive type. Yes and there was room for only one model in its natural size. And what kind of a design can there be for an automobile if the designer cannot move back from the model and view it from the required distance? One can surely understand this problem.

To the degree that it was possible, the new chief began with improving the "Ushastyy"; he removed its deformed shapes, made the sides more streamlines and made some changes in the interior.

But his chief concern was the new "ZAZ-1102" "Tavriya" automobile. It embodied dozens of solutions by the leading automobile powers and this of itself described its level. At the same time, it could have been assigned to production 10 years ago. The "Tavriya" was ready for this. It could have won over the foreign consumer, since by plan and design it was our first successful front wheel drive automobile. The characteristics of the experimental models were in no way inferior to the best foreign models. Why was not full advantage taken of the wonderful result? Was the general director at fault? Or the chief designer? Did they not struggle or strive hard enough?

Nonsense! The chief designer, as promised, supported Galchinskiy in all of his undertakings. The general directors—also. They were pleased with Galchinskiy's work and they considered him to be a specialist of the highest class. In short—an artist! They decided to build for him a "Center for Artistic Design." (In any case, they still strived to avoid use of the alien word "design" in the title lists).

The "Architecture Office" was equipped with shovels and other construction implements and the construction was carried out using the economic method.

The director procured the necessary currency. Two and a half million gold rubles! Trade with foreign firms was started in connection with the technical equipping of the center. Galchinskiy did all of the selection work himself. In particular, he liked the Italian system for automatic planning. Nobody, not even "AvtoVAZ," has such improved systems.

Certainly, prior to purchasing this complicated and expensive complex, a visit had to be carried out to the firm in order to feel the proposed purchase with his own hands. Quite possible, there could be other variants. However, at this time Galchinskiy was "unattached" or divorced and, as is known, trust is lacking in an individual if he has been unable to maintain proper order in his family.

I recall that I arrived at the "Kommunar" when the Italian specialists were installing the measurement complex. At the time, the building had already been erected. From the outside, nothing appeared to stand out but, as I had been forewarned, the inside of the building was remarkable: "The interior was striking! It had been planned by Galchinskiy himself." Before seeing "what it had become," I visited the former "architecture office" under the staircase in order to see what it was formerly. The "architecture office" was the same but for the fact that it had decreased in size. An iron grille network fenced off a corner in which several machine tools were located. Galchinskiy's desk was in its former position, while others were clustered together in groups. Map cases containing sketches lay on the floor as if they had been assembled together for the purpose of removal. There no longer was a mock-up of an automobile in its natural size, but rather there were two scale models-no large area remained. Here the entire scene indicated that the work was being curtailed and a removal of operations was in progress.

"Congratulations," I said to the first acquaintance who appeared on the scene. "Finally it has happened!"

"What has happened?" he asked.

"You are going to the palace."

"Somebody may be going, but not us," he said almost angrily.

It turned out that the design center had been taken from them. A lock had been fitted and a security guard assigned. I asked where Galchinskiy was. I needed an explanation as to what had taken place.

"Igor has taken ill and is at home. He does not wish to go to the plant."

I visited him at home, in his semi-basement one-room apartment where he recently settled. I noticed a number of pictures, melancholy autumnal landscapes. They hung on the walls or lay on the floor.

"What is all this?"

"As you can see, I have taken to painting. I have decided to recall the past." His appearance was of little importance. "I had to leave the plant. There is nothing enlightening there. The proper conditions are lacking and will be so for some time into the future."

It turns out that when construction was completed on the project and the Italians began installing the equipment, a rumor made the rounds throughout the plant that the SAPR purchased by Galchinskiy was capable of doing not only that which was required by the designers but also a great deal more: and for the machine tool builders, the pressers, the model makers and for God knows whom. Immediately there were powerful claimants desiring to take over the SAPR. The piece appeared to be too big for merely turning over to the designers. There were more important problems and services directly associated with production and the plan. And what could be more important than production and the plan?

In short, the problem was resolved beforehand. Galchinskiy attempted to protest but thee was nobody to listen. The future, that is, the design was to be sacrificed in favor of the present, that is, the production plan.

But let us not hurry to accuse the general director or general designer. The "Tavriya" model was guilty in all respects. It was confronted by an indestructible wall. At the same time, just as in Zaporozhye, front wheel drive automobiles were already in operation and a decision had been handed down at the highest governmental level to convert over to the production of this modern product of "AvtoBAZ" and "AZLK." The briefcases of the designers of the moment did not contain any developments worthy of the international level. They had produced obsolete products. But these were precisely the ones who received the currency and contracts with leading foreign firms for equipment deliveries, for the finishing off of structures, for consultations and other assistance. The Zaporozhye workers with their handsome "Tavriya" model stood off to the side. They were also promised assistance. However, not as soon, nor on such a scale. They had to wait for the future and, together with it, for the design center.

Nevertheless, Galchinskiy did not leave the plant. He could not tear himself away as he later explained. A design is a design and one cannot enter the international market without one—in the final analysis, this is understood by everyone. Moreover, the general director had promised: "Nothing of the sort can be repeated. We will build anew. And to the extent that we can do so, we promise to furnish assistance."

And relying upon his former energy, he began to build. Again, he acquired rose-colored marble. However, I was bothered by unhappy thoughts. What was there left for a talented individual to do and how would his people be occupied? Seven years passed for the first construction

project and two more for this one. In the future, two more would be required for the wind tunnel. When would work be carried out on the design? During nonworking time?

I saw a mock-up of the next "Tavriya" model—the five-door "Nol Pyataya." And its follow-up model, the "Nol Shestaya," the shape of which stunned me. Like a falling droplet. I saw them in one fourth of their natural size when Galchinckiy brought them to Moscow, to the university for trials in a wind tunnel. The "Nol Pyataya" was in no way inferior to the best foreign models and the "Nol Shestaya" exceeded all and even the most optimistic expectations of Galchinskiy. He said to me while shrugging his shoulders:

"Such aerodynamics are fantastic! This is our true automobile of the future! I would abandon everything else and concentrate on it!"

Two years have elapsed since he tested his brainchild in a wind tunnel and yet he has not abandoned everything else nor is he concentrating on this model. And it is not only because he and his people are engaged in the construction project. To make mock-ups for a future automobile without considering exactly what is to be embodied in the actual automobile is difficult work. Over a period of 2 years, only four models of the "Nol Pyataya" were made. Four! And there should have been dozens in different variants. And generally speaking, no work was carried out on the "Nol Shestaya." A modeling clay model is indeed not an automobile. It is only a concept of a design solution, one of many. In order to carry out a check on such a concept, design developments and also metal life are needed. And these are not available.

The "Nol Pyataya" finally reached the main assembly line. But the suppliers of metal and component parts did not carry through on their obligations and the domestic equipment was inadequate. The builders are late in turning over their projects. Heavy and exhausting work is the rule. The general director can only furnish, by way of assistance to the main assembly line, his last human reserve—designers, experimental services and testers. The future is again sacrificed in favor of the present. There is nobody to finish off the "Nol Pyataya" and nobody to plan the "Nol Shestaya."

"My chief task is to truly assign to production at least the "Nol Vtoraya," I was recently informed by the chief designer, V. Steshenko. "I do not have time for another model."

These were stern words he spoke to me.

When we became acquainted, he stated that he was 33 years of age when he began his front wheel drive work. His present age is 55 years. Over this period of time, he has designed and raised to the proper condition only one automobile.

Igor Galchinskiy was 30 years of age when he came to the plant. Today he is 42. During these years, he too has succeeded in embodying in metal the design for just one automobile—the same "Tavriya" model.

And human life is brief.

I saw Igor only recently. He had come to Moscow for a plenum of the Union of Designers and for the elections for candidates for the people's deputies of the USSR. The Ukrainian designers had nominated him. However, he did not obtain the required majority of votes.

"Everything was correct," he said with a sad smile. "I indeed made only one vehicle. Perhaps this is my ceiling."

"And what about the "Nol Shestaya"? I asked, recalled the astonishing droplet made out of modeling clay. "When do you plan to make it?"

"Well, we are talking about the remote future," and he added: "If nothing changes and if I am pensioned off."

He returned to Zaporozhye to finish building his design center.

Yevgeniy Temchin Zaporozhye

With a Trailer of Ambitions

"A 'Chayka' with a trailer... losses"—such was the title of a letter sent in by the brigade leader of a group of fitter-assemblers at the Gorkiy Automobile Plant S. Barabashin, with the letter being published in this newspaper on 11 November of last year. The author assembled "Chayka" vehicles for more than 10 years—automobiles for ministers and other high persons. And throughout all of these years he heard discussions of how the "Chayka" was a clear luxury for official trips.

Moreover, it turns out that the passengers of chic personal limousines paid less for them than they cost. The difference was considerable—6,000 rubles. During a year's time, a round amount of almost 1 million rubles was accumulated. A net loss. Formerly, Minavtoprom compensated the Gorkiy workers for these expenses. But with the conversion over to self-financing, the enterprise began to make payments from its own pocket. And the automobile plant workers were aroused over this development.

Instead of the "Chayka," the designers proposed the new "GAZ-3105" model. However, the workers were less than enthusiastic regarding this innovation: it will be more comfortable and two and a half times more expensive than the "Chayka, but it will not enter the national economy nor the international market for the affluent, but it will be used for servicing a small group of highly placed individuals.

A huge building is already under construction for the "3105" and equipment is already being installed here—equipment purchased with currency from abroad. For this prestigious automobile, the plant procured 98 billion rubles from the state and added another 59 million rubles from its own resources. Meanwhile, just as in the past, such models as today's "GAZ-3102," "GAZ-2410," and "GAZ-2411" continue to be mass produced. They do not provide any competition for western firms and never will. They are being continued only because the country simply does not have any other models of the same class. It generally is not known when new models will be added to production.

Thus the "green light" has been given for the limousine to be used for representation purposes.

The letter by the brigade leader aroused many responses. Including some from the Gorkiy Automobile Plant. Here is what worker M. Ivanov wrote: "The criticism is fair and the arguments objective. However, it is a shame that the questions were raised by S. Barabashin and not by the present leader of our plant. Their servility is a blow not only against the enterprise's prestige but also against the economy and the pocket of each one of us. Even under the conditions imposed by glasnost, the plant continues to be subjected to policies in which only the leaders and not the workers participate. We are reconciled to the old method of being led by the bureaucratic apparatus of the party and trade union—we have no voice. But for how long?"

And actually, in the official reply from the Gorkiy Automobile Plant, signed by the association's technical director V. Churayev and the secretary of the party committee V. Tsibakev, the wording was formal and direct:

"Truly, for a number of years the plant has produced the representative GAZ-14 'Chayka' small automobile, the production cost of which has been higher than the wholesale price."

In accordance with a decision handed down earlier, the mentioned automobile has been removed from production. It is being replaced by the more economical and comfortable medium class "GAZ-3105" small automobile model (it was stated exactly in this manner in the text of the letter—editor's note).

This model is being used at the present time for developing modifications which will be produced under mass production conditions and with a high degree of standardization.

This work is being carried out within the framework of implementing a program of scientific-research and experimental design measures aimed at creating new generations of small medium class automobiles that are in keeping with the current and international levels.

The reply by the former general director of AvtoGAZ and now minister N. Putin is distinguished only by greater dissatisfaction with the publication:

"The total amount of the funds already spent, as pointed out in the letter—100 million rubles—was allocated not only for the creation and production of the Model '3105,' but also for the technical re-equipping and renovation of the association's entire scientific-research, testing and experimental-production base, intended for the creation of new equipment for a considerable period into the future. Commencing in 1988, the plant began utilizing the funds allocated.

"However, some doubt arises concerning the legality of the method for transferring material when the facts and figures obtained by a newspaper correspondent from plant workers, in the spirit of glasnost, are brought to their attention in the form of a letter from a worker to a newspaper. The impression is created that the journalist is using this method in order to shift responsibility from himself for his own inadequate professional interpretation of the information obtained."

The last passage in the minister's letter requires an explanation. Following publication in SOTSIALIS-TICHESKAYA INDUSTRIYA, S. Barabashina went directly to the production manager N. Savonov and demanded a letter of retraction. It was maintained that the letter contained many mistakes.

"Although I understood nothing," I was told by the brigade leader, "I nevertheless was unable to obey the manager."

Almost as though it was dictated by N. Safonov, he wrote a statement to the editorial board. I will quote it in its entirety: "The article entitled, 'Chayka With a Trailer... of Losses,' was prepared by correspondent V.A. Noskov following a discussion with me. However, I did not have the numerical data at my disposal and thus I was not able to confirm their authenticity. This information was obtained by correspondent V.A. Noskov from persons or sources not known to me. In signing the letter, I placed my trust in the figures cited by correspondent S. Barabashkin."

This reaction by the automobile plant workers to their former general director N. Pugin did not surprise me. For decades, "AvtoGAZ" was beyond criticism. Here the information did not have to be dragged out using pincers. Everything here, just as during the stagnant periods, was of a secret nature. And worst of all, these secrets were kept from the workers. In such a situation, I had to furnish assistance to S. Barabashin in the form of figures which neither he nor his comrades were able to obtain at their own plant.

Nor was I surprised by the fact that the expenditures for a prestigious automobile are camouflaged, as always, by the interests for development and the future. On more than one occasion, AvtoGAZ stated that it intended to create a range of promising and competitive automobiles. But where are they? In the early 1980's, the general director N. Pugin held out such a prospect for the "3102" model. But it was assigned to the assembly line and thereafter followed by the "GAZ-2410" and "GAZ-2411"—and we all became convinced how much worse they were than similar models being produced by foreign firms.

Today N. Pugin is promising that, immediately following the basic model, more simple ones will reach the market—"3103" and "3104" standardized with the prestigious "3105." But where will they be produced? It is impossible at GAZ: a new production operation must be developed since the old one is unsuitable. Thus the real time is not just 1-2 years as society would have us believe, but rather at the end of a century. What kind of competition can there be with such obsolete vehicles? Why repeat the same mistake?

"It is possible that these models are not needed," stated the chief designer Yu. Kudryavtsev, in an attempt to reassure us. "We are presently negotiating with 'Ford.' Our firm is proposing to purchase from it the design and technology for a vehicle."

It turns out that there is a simple solution. This prestigious automobile has nevertheless been placed in an exceptional situation not for the sake of the future. Just as in the past, obsolete models will roll off the GAZ assembly line and the personal limousines will please the self-esteem of a small circle of officials.

"Is it your opinion then that they must travel on foot?" categorically interjected still another chief designer V. Nosakov—today there are simply small automobiles. "Fortunately, the directive organs view the situation differently and we carry out their instructions."

Many of the automobile plant's leaders refer to these mythical instructions. About 5 years ago, this was sufficient for "terminating" this delicate subject. Today I ask that a document be shown. Naturally, it turns out to be a secret document. It cannot be shown or made available.

Meanwhile, frankly speaking, I have long been familiar with this secret. It seems that the deputy chief designer for economics P. Babich revealed the document almost 3 years ago when a reference was made to the directive organs. It turns out that GAZ was truly ordered to create a new vehicle in place of the "Chayka," only one that would not be quite as pretentious and the price of which would not exceed 20,700 rubles.

For today's "3105" model, the automobile plant workers are asking 68,000. Let us compare and give some thought to the matter: what about the directive organs and their instructions. Indeed, compared to the "3105" model, the "Chayka" is no luxury. The new automobile will have a

television set, a computer, special communications, radar, an air conditioner and many other costly devices which a simple mortal domestic motor transport passenger has not as yet even heard of. Using currency, the plan will purchase these "regal" comfort accessories from western firms.

Only who will earn this currency? "AvtoGAZ" which appropriates it from the treasury? No, the Tyumen oil workers who extract petroleum and gas from the ground during 40 degrees of frost and furious winds. But even with their northern coefficients for pay, they will be unable to afford this new vehicle.

Could it be that our comrade minister has a more professional interpretation for this information?

Vladimir Noskov Gorkiy

Canadian Variant

Canada produces fewer motor vehicles than does the Soviet Union. However the Canadians earn just as much from their automobile exports as the Soviet Union does from its petroleum exports—approximately 17 billion dollars annually. Yes and another 7 billion for units and spare parts.

It should also be mentioned that almost all of the automobiles (98 percent of those exported) are sold on the extremely rigid American market. Our cheap "Lads" and "Sputniks" are simply not accepted there—mainly because of ecological and road safety considerations. It bears mentioning that in the early 1960's the level of Canadian automobile construction differed very little from our Soviet level. That is to say that we started at that time from the same line.

However, we achieved different results. Canada's population is less than ours by a factor of more than 11. Yet its pool of small automobiles is greater by 1 million.

We export 300,000 vehicles out of our annual production of 1,300,000. Canada exports two to two and a half times more depending upon the market conditions.

We protect our critically short internal market against imports. The Canadian consumer can select any model known throughout the world and without having to wait on line.

In order for us to reach the international standards for consumption, we must sell 12 to 15 million small automobiles annually within our own country. Is this realistic? Today we are annually selling slightly more than 1.7 million units: of this number, only 1 million are new vehicles—the remainder being used or second hand machines. Assuming a most favorable combination of circumstances, domestic automobile construction could produce 1.675 million vehicles by 1995, or 25 percent more than the present level. And by the year 2000—2.3

million. As you can see, a sharp improvement in quality will not take place. Yes and our economy is incapable of achieving such an improvement.

There is one solution: to utilize the resources and opportunities afforded by international economics. But how? Indeed, during the 1960's we purchased VAZ in Italy, in the 1970's we purchased KamAZ in the FRG and recently we used state currency for purchasing equipment for AZLK and "AvtoGAZ." All of these examples convincingly reveal one fact: even using excellent imported equipment, we still end up producing poor automobiles.

It is not possible to purchase in the west 10 automobile giants on the scale of VAZ or Elabuga. The supply of petroleum dollars has been exhausted. It is dangerous to take over plants based upon currency credit: we lack the experience needed for handling credit intelligently. Moreover, there is still not one socialist country which has succeeded in ensuring a return of credit based upon an expansion in industrial exports. Neither Poland, Hungary, Bulgaria or Yugoslavia.

And yet the "Canadian variant" could prove useful to us. In developing its automobile industry, the Canadian Government did not plunge itself into heavy debt, nor did it spend state currency reserves in order to purchase an automobile giant worth 1 billion dollars. Nevertheless, the value of Canadian exports to the United States has increased by a factor of 244 over a period of just 18 years—58 million dollars at the beginning, in 1964, and 14.17 billion dollars by 1982.

In the early 1960's, the capacity of the internal Canadian market was also not very great. Moreover, it was protected by a high customs tariff. Nevertheless, for every 10 Canadian automobiles that were sold, 7 were imported. Certainly, they were American.

In 1982, the Canadian Government abolished the duty on imported parts. All four of the American automobile corporations rushed to build assembly plants in Canada. This has now turned out to be more profitable than the importing of finished vehicles from the U.S.A. As a result, first of all practically all of the American models appeared on the Canadian market and, secondly, a sharp competition arose among the "big four."

A reader might very well ask where is the profit for Canada if the Canadian branches are the property of the Americans? But it must not be forgotten that two thirds of the expenses for producing automobiles in the West are for the wages of manual and office employees. This money is guaranteed to remain in the country, since it amounts to imported foreign capital. (For comparison: in our domestic automobile industry, this proportion is one fourth lower—15.2 percent). The more automobiles that are produced, the higher is the personal income of citizens and the greater the capacity of the internal market.

The Canadian Government has proceeded in a completely logical manner, stimulating growth in production at Canadian branches of American corporations.

Towards this end, in 1963 the corporations were presented with the right to duty-free importing of automobiles in a volume equivalent to the growth in exports of a Canadian branch. That is, the quota for the internal market was exchanged for the quota of the foreign market. And the exchange was very profitable. Indeed, each of the competitors, in pursuing primarily its own profit-growth in the overall market for its corporation-began curtailing production in the United States and increasing it in Canada. The government of the United States at this point became somewhat alarmed. Negotiations commenced. The result of these negotiations was the 1965 American-Canadian Automobile Agreement. Freedom to trade in both automobiles and in the units and parts required for their production was proclaimed. And in the process, Canada managed first of all to obtain a guaranteed level of production and, secondly, an equal share with the more powerful American industry in expanding the automobile market.

And thus it was by no means an accident that in just a period of 8 years—from 1964 to 1972—Canada's proportion of automobile imports in the U.S.A. increased from 8.6 to 53 percent.

Thus, intelligent foreign-economic policies ensured the active participation of foreign capital in developing the economy and raising the standard of living for the population of Canada.

Can we in a similar manner attract foreign capital into our automobile industry? Can we manage in the absence of crippling loans?

It must be assumed that this is impossible with today's economic mechanism.

It is impossible first of all because capital represents value that produces surplus value, that is, income. The structure of our economy is such that each dollar invested by us will furnish 2.5 times less income than that in countries with a market economy. This is mainly owing to the fact that public capital in our case turns over at a rate that is two and a half times slower than in other countries.

What type of owner would risk investing money in such an inefficient corporation?

The situation will not be saved by joint enterprises. The approach by our side to such enterprises reflects the old and stagnant prejudices—they are initially oriented towards exports (the principle of currency self-recoupment), that is, for winning over alien markets. Who awaits us there? The losses for sales expenses there will

be deliberately higher than all of the profit realized from the use of cheap man-power here. It is by no means an accident that there are so few joint enterprises.

Meanwhile, the entire world long ago drew the conclusion that it is more profitable to develop new markets than to win over old ones. It is always profitable to exchange one's quota profitably at a promising new market. Thus, in our case, prior to launching a campaign for foreign money, we should create conditions which will make money in our own country. At home, as is known, even the walls provide assistance.

We need a market and thus full competition is needed. A Soviet consumer will then be able to voice his opinion and have a sense of his own worth.

We will then be able to take advantage of our natural proximity to western Europe and Japan. Let us develop our market and build automobile plants and automobile highways, gasoline service stations and camping grounds on our own territory. Let us compete against one another and allow everyone to bring in earnings as needed.

The workers will gain most of all from such actions. Earnings will increase. It will then become possible to purchase many things using honestly earned strong rubles, including automobiles.

The treasury is the winner: the higher the income of the population and enterprises, the greater the tax withholdings.

A loss is sustained only by the unrestricted lord of our automobile market—the state monopoly over the production and marketing of automobiles.

Under monopolistic conditions, it is unprofitable to increase production sharply: the strength of a monopolist lies in a shortage in his products. And thousands of objective reasons can be found to explain why for 10 years now the production of small automobiles has remained at the 1.3 million mark.

Under monopolistic conditions, it is unprofitable to renew production and to strive for technical progress. Indeed, the more worn out the equipment, the higher the rent which an owner places in his pocket with almost no fuss or bother. Thus for decades only slightly modified models have been moving off the assembly lines and only minor attempts have been made at "mastering" imported equipment.

Only under monopolistic conditions is it possible, under the guise of a turnover tax, to impose an excise tax upon production. The size of the excise tax, according to various data, amounts to from 5 to 9 billion rubles annually. This money is more than enough for ensuring expanded reproduction. A state monopoly makes it possible, under the cover of a unified technical policy, to prevent automobile plants from competing among themselves. And the poor "Tavriya," which crossed over to "AvtoVAZ" and "AZLK," is only one and perhaps the best example of dishonest competition. How many talented people have been ruined by the suffocating atmosphere of secret intrigue?

Finally, it is only under monopolistic conditions that it is possible, under the mark of planned tasks and state orders, to assign unprofitable vehicles to production deliberately. Monopolies can allow themselves to do this. By means of super-profitable vehicles.

But what about tomorrow? Will branches of "Fiat," "Volkswagen," "Daimler-Bend" and "Reno" appear? Will this spell the collapse of the administrative rule of the monopolists? It will then be obvious to all: who is who.

Leonid Skoltsov

And Tomorrow?

In the mid-1970's, BAZ supplied 42 rubles worth of spare parts annually for each small displacement automobile. By the beginning of the 1980's, this indicator had declined to 36 rubles worth and today the figure is 26 rubles. The situation is even worse for the remaining plants.

There are 21 modifications for purchasers of the "Ford-Escort" automobile, which resembles our "VAZ-2108." They consist of various combinations of six engines, three transmissions, four types of bodies and seven sets of equipment and finishing off materials. A model can be selected from 17 different colors!

All work concerned with the French "Reno-19" (in our "Moskvich-2141" class), from the moment the technical task was obtained until the first vehicle rolled off the assembly line, consumed 42 months.

The American "Chrysler" Firm guarantees defect-free work for its vehicles for 110,000 kilometers or of a period of 3 years. In addition, it provides a 7-year guarantee against through corrosion of body elements.

In six countries throughout the world, there are from 600 to 400 automobiles for every 1,000 inhabitants (including elderly people and children). From an average statistical standpoint, this means that each family has a vehicle. In the USSR, there are less than 50 vehicles for every 1,000 inhabitants.

Compared to a number of automobile corporations, our avtoprom [automobile industry] is by no means a giant but merely an average size industry. Let us take, for example, the Japanese "Honda" Firm, which was known to very few people 20 years ago. Today there are five

plants and 60,000 employees. In 1987, "Honda" placed seven new models in production. During this same year, 1,580,000 automobiles (67 percent on the foreign market), 2,620,000 motorcycles (71 percent for export) and 1,620,000 lawn mowers, garden tractors, outboard motors and other small items of equipment were produced. Its range of automobiles is being renewed every four years.

Deputy Automotive Minister On Measures To Satisfy Private Car Demand

18290149 Moscow PRAVDA in Russian 31 Mar 89 Second Edition p 3

[Interview with V.P. Morozov, 1st Deputy Minister for Automotive and Agricultural Machine Building by L. Lebedev: "Automobile: Supply and Demand"]

[Text] Recently there has been a sharp increase in the demand for small automobiles. The lines of those "registering for vehicles" have never before been so long and it is easy to foresee that the waiting period will be longer than in the past although, quite frankly, the purchase of a vehicle was also difficult several years ago.

Beyond any doubt, there are several reasons for this situation. There has been an increase in the population's savings and many individuals are trying to find reliable objects for investment. A vehicle is highly sought after, since the demand for it continues to remain stable. Moreover, a greater number of people are now aware that a private car can bring about quality changes in the life style of its owner and his family. The explosive-like effect of gardening and resort construction is having an effect. Here it is generally difficult to exaggerate private transport.

In their letters, readers have also cited other weighty arguments for obtaining vehicles for their private use. Not free of charge—for their own money. For example, this question has been raised by labor veterans (a vehicle upon retirement), invalids and by families with many children.

Thus, the demand is great. And what about the supply? What are the future prospects? A PRAVDA correspondent discussed this subject with the 1st Deputy Minister for Automotive and Agricultural Machine Building V.P. Morozov.

[Lebedev] Valentin Pavlovich, for a long period of time we have held to the opinion that a small automobile is an object of luxury. But a giant automobile plant has been built in Tolyatti—the Volga Automobile Plant and there are now more vehicles. Moreover, the attitude towards these vehicles has changed—many are now able to obtain suitable means of transport. It can be stated that the birth of VAZ [Red Banner Order of Labor Volga Automobile Plant imeni 50th Anniversary of the USSR] inspired optimism in our potential lovers of automobiles.

[Morozov] You are correct. The appearance of our Volga Automobile Plant was an important event and one which cannot be underestimated. The problem is not simply one of the technical and economic aspects associated with the creation of this gigantic industrial complex. To a large degree, VAZ has changed our psychology and, if you wish, the quality of our thought.

Over a period of many years, the semi-official point of view was promulgated and publicized—that our "Soviet individual" must travel only in autobuses and that this constitutes one of the manifestations of the "collectivist principles" upon which our socialist world outlook is based. Yes, the Soviet Union has become the world's largest producer of autobuses and this is proving to be of great assistance in untangling the serious transport problems in our enormous country. But life has shown that we cannot limit ourselves to autobuses alone. The optimum variant consists of a harmonious combination of public and private transport. And the creation of the Volga Automobile Plant represents the first step taken in this direction.

Judge for yourself. During the mid 1960's, when the decision calling for the creation of VAZ appeared, 200,000 small automobiles were being produced in the country. This number was sufficient only for maintaining the required pool of official vehicles. In less than 10 years, thanks to VAZ and the development of the automobile plants producing small automobiles (Moskvich, Volga, Zaporozhets and IZh), their production was increased by a factor of six. At the present time, 1.3 million vehicles are rolling off the assembly lines annually.

[Lebedev] But approximately 20 years have elapsed since VAZ was placed in operation. Why is it that other similar plants have not been built? If this had been done, there obviously would not be a shortage of automobiles.

[Morozov] Throughout, we have continued to build motor vehicle plants, only for the production of trucks and not small automobiles. A need existed for satisfying to the maximum possible degree the national economic requirements for trucks while decreasing the importing of such vehicles. Such was the very important state task assigned to our branch. You will remember that, following VAZ, a sharp increase took place in the production of the powerful KamAZ [automobile produced at the Kama Automobile Plant] vehicles. The production of ZIL [automobile produced at the Moscow Automobile Plant imeni I.A. Likhachev] and GAZ [automobile produced at the Gorkiy Automobile Plant] vehicles at the Minsk and Kremenchug plants was expanded. On the whole, a sufficient number of trucks is being produced at the present time.

Here I would like to mention one fact which, although it does not have a direct bearing upon our discussion, nevertheless appears to me to be extremely worthy of note. Recently, 25 powerful BelAZ vehicles were shipped

from Belorussia to the U.S.A. They were purchased from us for work in open-cut mines. Thus, Soviet automobile construction entered the American market for the very first time.

[Lebedev] Does this mean that we no longer have any truck problems?

[Morozov] They are being produced in adequate numbers. True, it must be admitted that we still do not have sufficient specialized trucks, vehicles with powerful motors, interchangeable bodies and of low tonnage. We are presently undertaking measures aimed at making their production structure more efficient.

At the same time, another serious task is being resolved—the conversion of trucks over to diesel types of fuel. And this is providing us with a fuel savings on the order of 25 percent.

I am aware that a discussion on trucks will not console those who wish to acquire a small automobile. However, I hope that each individual understands how important this is for the country. We must also take into account the expenditures and amount of effort involved.

[Lebedev] If memory serves, it was Ford who stated that the automobile created America. We must understand that automobile construction is an extremely profitable branch and that all expenditures and efforts involved are rapidly compensated. Is it true that the more we invest, the more we will obtain?

[Morozov] Here we must view the picture as a whole. The problem should be discussed in greater detail while taking into account the fact that the majority of readers, I would venture to say, possess only a simplified understanding of the question: automobiles are needed—we will build new plants. Meanwhile, the construction of an assembly department and the placing in operation of an assembly line—still does not mean that a new machine will enter the market.

Let us take this same VAZ. It is not simply a matter of the number of machines in the country increasing as a result of the placing in operation of the plant in Tolyatti. There is a good basis for referring to the "VAZ phenomenon." This phenomenon by no means has to do with quantity, but rather it involves another factor. The mass production of a progressive small automobile required the mastering in related branches of hundreds of types of new materials, equipment and component parts, none of which were produced formerly by us on an industrial scale. Towards this end, large-scale production operations were created in ferrous and non-ferrous metallurgy, chemistry and petro-chemistry, construction materials industry, light industry, machine tool construction and in electrical engineering. Yes, in this sense automobile construction creates industrial potential and on the whole gives the economy a powerful impulse.

For example, at the present time VAZ is receiving component parts from 400 suppliers on a daily basis (I emphasize the word daily!). For the very first time, these parts, which were developed thanks to VAZ, are going beyond the framework of automobile construction and are being employed extensively in many other branches of industry. This "expanding" effect has made mass automobile production and its attendant infrastructure a most important component part of the country's overall industrial potential. And the development of this potential is constantly being stimulated by accelerated scientific-technical progress in automobile construction. It is from this standpoint that I consider the automobile industry to be a priority branch even within the machine building complex.

[Lebedev] Does it not seem to you, Valentin Pavlovich, that our small automobile production needs a new and powerful impulse, particularly in view of the fact that it is having such a beneficial effect on the country's economy?

[Morozov] This is needed from many standpoints. First of all, the income of many workers has increased substantially. If memory serves me correctly, then according to an estimate by USSR Goskomstat [State Committee for Statistics], the number of savings bank depositors who are prepared to procure an automobile even at today's prices is approaching 3 million and the development of the economic reform may increase the number of potential purchasers. Secondly, the "autobus psychology" is being replaced by a new understanding by the people of the "quality standards" of life. I believe that any owner of an automobile is aware of the degree to which a vehicle raises the level of life's opportunities—in work, daily routine, recreation and others.

At the present time, the pool of small automobiles belonging to the population exceeds 13 million units. This means that more than 40 million Soviet citizens are now using their own means of transportation. I am sure you will agree that considerable progress has been achieved.

[Lebedev] This progress has been so considerable in fact that there are those who no longer can contemplate life without "wheels." There are even greater numbers of people who dream of sitting behind the wheel of their own vehicle for the very first time. And the demand for small automobiles, notwithstanding their high cost, is increasing with each passing year. But the purchase of a vehicle, alas, is a problem in itself.

[Morozov] Yes, in light of these realities the persistent and generally valid desire on the part of many people to acquire an automobile as rapidly as possible is readily understandable. The demand has truly increased greatly. The statistics reveal a relatively low level of per capita availability of small automobiles throughout the country. Compared to West European countries and Japan,

where there are 300-400 vehicles for every 1,000 inhabitants and in European CEMA member states—150-200, in our country this indicator is approximately 50 small automobiles for every 1,000 members of the population. Even if we take into account the lower level of development of our highway networks and the sphere of attendant services (automobile servicing, motels, camping grounds and others), the potential capacity of the small automobile market is still nevertheless quite considerable.

[Lebedev] The economists never tire of emphasizing the "inability of the market to cover the effective demand of the population." Simply stated, there is a shortage of goods. Meanwhile, the sale of motor vehicles is very profitable for the state. In the face of such demand, it would appear that elementary economic logic would point towards the immediate utilization of the opportunities that are opening up in this area.

[Morozov] Use is already being made of them. As is known, following the 19th All-Union Party Conference, which reinforced the program for strengthening the social orientation of the economy, the USSR Council of Ministers adopted a decree which called for the country's capability to produce small automobiles to be increased to 2.3 million units annually by 1985. If we compare this figure with the level achieved today (1.3 million), then it would appear that our capability in small automobile construction must be almost doubled. In essence, this is a most important state decision in the area of small automobile production—and in terms of its scale, it exceeds the construction being carried out at the Volga Automobile Plant.

[Lebedev] What is being done from a practical standpoint?

[Morozov] The chief element of this grandiose program—the creation of a new plant at Elabuga, for the production of 900,000 micro-liter "Oka" automobiles. And what will be the cost of a new automobile plant of such capability? First of all there is the matter of its construction—an extremely expensive undertaking. The automobile plant itself is only the visible portion of the iceberg. Without going into details and using ElAZ [Elabuga Automobile Plant] as an example, I will state that the cost of the automobile plant proper will amount to only 40 percent of the overall expenditures.

[Lebedev] And what will the remainder be used for?

[Morozov] Let us consider the matter. A modern automobile includes roughly 10,000 unique parts and units. Usually almost one half this amount is produced at the plant itself. The remainder—component parts supplied by other plants. Thus the "Oka" automobile requires more than 460 types of new materials or a sharp increase in those already developed. In order to ensure continuous production, for example 3,000 automobiles daily (the planned capability for EIAZ), 12 new plants will

have to be built for the branch and 17 of the existing ones expanded. In addition, there will be deliveries from related branches—machine tools and automatic lines, metal, rubber, plastic, upholstery fabric, glass, paints and undercoating. The production of these materials will also require the placing in operation of new plants and new capabilities. Here we have in mind the creation and modernization of more than 50 plants. This involves considerable amounts of money.

Finally, there will be approximately 80,000 workers employed at EIAZ and if you count families—a minimum of 250,000. As we see it, there will obviously be a need for building a new city containing kindergartens and schools, movie theatres and athletic facilities, a bread baking plant, meat combine, autobus and trolley bus pools, a heating plant and many other installations. All of these facilities and installations will add to the billions of rubles required for the construction of one modern automobile plant.

True, a small automobile is a popular product and the expenditures for production will be repaid within 3-4 years.

[Lebedev] Is the problem only one of money? Indeed, it is known that the deposits by the population in savings banks exceed 280 billion rubles. And many are prepared to lend their savings for the construction of an automobile plant if it will mean that they will obtain a new automobile after a definite period of time has elapsed and perhaps with a percent or two of interest for their investment.

[Morozov] Yes, I am aware that those desiring to obtain an automobile are willing to take out an automobile loan in behalf of the construction of new automobile plants, with the guarantee of obtaining a vehicle after a definite period of time. They are proposing the issuing of stock or something similar for a fixed period of time, for the construction of an automobile plant, in like manner as is done in order to obtain housing. In any case, we are grateful to our voluntary potential creditors. But the problem is considerably more complicated. We have lived too long under the conditions imposed by a limitdistribution economy, in which money has to a certain degree lost its original function as general equivalent. It turns out that the second element of the well known political-economic formula "money - goods - money" has somehow escaped. In our case, goods are not so much exchanged for money as they are distributed among addresses determined in advance. Simply stated, we still do not have wholesale trade in the means of production or in the principal materials and at best we pay the population money for manpower and then only if it is available. Indeed, for the construction of new automobile plants we need in addition "active" machine tools and automatic lines, rolled metal, pipe, cement,

engineering equipment, reinforced concrete, glass, electronic components and others—that is, true goods, which must be produced in quantities which will allow it to be purchased and not merely obtained on the basis of funded orders.

In other words, we need not so much the money of workers, but rather the specific results of their labor, which must be highly productive and efficient at each working position throughout the entire economy. In this manner the automobile industry, to a greater degree than any other branch of industry (and herein lies its specific technical-economic character), will reflect the overall level achieved by the country's economy on the whole.

[Lebedev] This undoubtedly is a very important explanation and reply to the questions sent in by the readers of PRAVDA. However, I would still like to learn from you the schedules planned for the production and sale of the "Oka" automobile. And what are the plans for increasing the production of this model? Is it not true that limits have been distributed in some areas for the "Oka"?

[Morozov] Rather than waiting for the Elabuga capabilities to be placed in operation in 1991-1992, we are already organizing today the production of the "Oka-1" at the Volga Automobile Plant and at KamAZ [Kama Automobile Plant]. The initial vehicles of this model will be made available for sale this year. Over the next few years, the production volume for the "Oka" automobile will be increased at these plants

[Lebedev] And what new developments are being proposed by the existing automobile plants?

[Morozov] During this present five-year plan, all models of automobile equipment presently in production will either be replaced or modernized. Here we have in mind a total of more than 240 types.

[Lebedev] Let us concentrate on the small automobiles.

[Morozov] As you wish. We will begin with the VAZ. It is making plans for the production of the 21093 and 21099 models and for the future—the "Desyatka." These models are more comfortable and modern by design.

The AZLK [Moscow Order of Red Banner of Labor Automobile Plant imeni Leninist Komsomol], as known by the lovers of automobiles, has commenced the production of the "Moskvich 2141." A VAZ engine is still being used in it and yet those who pass by the Automobile Plant imeni Leninist Komsomol will note that a new building is under construction—a new engine for this vehicle will be produced here. The engine is more powerful and has a 1.8 liter volume. The "Moskvich" automobiles will be equipped with them 2 years from now. In the future, a "sedan" model will be produced based upon the 2141 model.

The "Tavriya-1102 model" is rolling off the assembly line at ZAZ [Zaporozhye Order of the Red Banner of Labor Automobile Plant Kommunar]. Active work is presently being carried out on the five door ZAZ-1105 model.

[Lebedev] Will there be an increase in the number of vehicles being produced at these plants?

[Morozov] At the present time, the question concerning an increase in the production of automobiles at AZLK and at the Zaporozhye plant is being examined. However, this will not be an increase which will change radically the degree to which the market is saturated with vehicles. This will require fundamental decisions concerning the construction of new automobile plants.

[Lebedev] In their letters, some of our readers are expressing doubt as to whether or not we should continue to develop new models. They wish to know if it would not be better to saturate the market with models which have already proved their worth.

[Morozov] This is a complicated question. First of all, why should a Soviet individual travel in vehicles of obsolete models? This would be improper and unfair. On the other hand, the fact that a plant produces old models for an extended period of time does not necessarily mean that it will increase the production volume with each passing year. A dead end variant! The discussion can only go in one direction: without lowering the production volumes, to modernize the models or to undertake the production of new vehicles at existing plants and, at the same time, to create new capabilities and new automobile plants.

[Lebedev] A number of readers have expressed the opinion that we must not sell vehicles abroad until our own domestic market is saturated. What are your thoughts in this regard?

[Morozov] One can understand these people—truly, the line of people waiting for automobiles is moving slowly. However, we must participate in international trade. In particular, we must rely upon purchases of foreign raw materials, other materials and equipment for the production of our own automobiles. We must somehow be able to settle accounts with our foreign partners and sell something to them. I hope the readers will not be offended if I ask: are many of them engaged in production operations which result in export deliveries of scientific-intensive products in considerable quantities? Let them answer by crossing their heart in sincerity.

All of us must take into account the economic realities. They affect all of us either directly or indirectly.

There is another important aspect to this question. The campaign in the international automobile market is enabling us to maintain the international level for our vehicles and to follow an intelligent program aimed at improving their quality.

[Lebedev] There is still one other point of view regarding the automobile shortage. Many readers harbor the belief that this shortage would not be as noticeable if more spare parts were produced.

[Morozov] If you please, I would like to precede the answer with a question: have you seen our automobile graveyards? And those who have been abroad have undoubtedly taken note of the numerous dumping grounds for old vehicles which have still not been shipped for processing. In our case, the owners of small automobiles strive to prolong their operation as long as possible. Thus it turns out that a vehicle expected to last for only 10 years is actually used for twice this period of time.

Understand me correctly: it is not my intention to reproach an owner. And for what purpose? One individual may lack the money needed for purchasing a vehicle, while another is happy in the knowledge that he has the means although the shortage prevents him from obtaining one. Strange as it may seem, the production volume for automobiles and the availability of spare parts for them are inseparably associated with one another. The more a vehicle is used, the greater will be the need for carrying out repairs on it. This is an axiom. At the present time, more than one half of the privately owned vehicles have exceeded their computed period of operation. Instead of expanding the production of vehicles to the maximum possible degree, we are expending a considerable portion of our capabilities on the production of spare parts.

[Lebedev] As the satirists have stated, the rescue of those who are drowning is a matter for the arms of the victims themselves. Is it an obvious fact that the situation will change if the production of vehicles is increased?

[Morozov] Beyond any doubt. And there will still be vital requirements—the need for spare parts will be even greater. The situation today is as follows: for the nomenclature of spare parts being produced by our branch, the demand is being covered by 80-90 percent. But our allied organizations are satisfying the requirements for spare parts by only one third and thus we are experiencing an acute shortage of glass, mechanical-rubber products and electronic units.

Much is being done at the present time to attract the enterprises of other branches into participating in this work—particularly enterprises of the defense industry. In addition, we believe that cooperatives are fully capable of producing spare parts.

[Lebedev] It turns out that we have returned to the beginning of our discussion: the automobile industry exists not for itself, but rather it reflects the overall level of economic development.

[Morozov] Yes, this is true. The satisfaction of the population's demand for automobiles is a task for the entire machine building industry and, even more important, it is a task which touches upon all branches of industry.

RAIL SYSTEMS

Line Work, Discipline Problems Addressed 18290145 Moscow GUDOK in Russian 30 Mar 89 p 2

[Article by Yu. Yefremov, head of the Department of "The Track and the Track System," honored railroad worker: "Prestige and Discipline Are Inseparable"]

[Text] Why does the fifth section have the most transport wrecks and accidents taking place through the fault of the railroad men? Is the structure of the track really unreliable? I do not think this is so. The answer, it seems to me, lies in the superficial way of life of today's track workers. The snag is in general not in the structure and even so much the system of maintaining the tracks, as in the state of the discipline, which is consistently falling.

Production, technological and social discipline are interrelated. This is essentially the foundation on which the reliability and safety of transport are maintained. We, the veterans, can see not only the signs of technical progress, but also what accompanies it.

Right now one often hears, they say, that the vocation of a railroad worker is not prestigious. Really, though, it was not always that way.

In its time, let us say, the vocation of a railroad man was mainly that of his descendants. For example, a railroad trackman often served the kilometers assigned to the whole family, struggling for the reliability of the route and for its external appearance and beauty. He bore the direct responsibility for the safety of the traffic on his section.

Gradually the structure of the track grew stronger, the technology of its repair and maintenance changed and low-level mechanization was introduced, but because of this the staffs also had to be reduced. Continuous track appeared—again the people were cut back. They also dropped the trackmen, after which the tracks remained unmonitored!

Not being of a philosophical bent, the main track administration gave the order: "...the most experienced track fitter of the brigade will be sent from the brigade every day for patrolling." So from a brigade in which there are only three or four persons, the most experienced fitter goes off—for a stroll. His average wage is ensured him.

Since that is so, he can "patrol" anywhere on the track section. After all, he is not answerable for anything now. What is asked of him, if he is simply a rank-and-file fitter.

With the transition to the Belorussian method, the staffs began to be reduced again—moreover, often those who should have given results with their labor. Wages rose not only for the remaining workers, but also for those serving both on the line and in the divisions and administrations of the road. Some people could not even answer as to why they had been given a raise. Is this really not a parody of the Belorussian method?

Given the same transport volumes, the reduction in the staff gave a "rise" in labor productivity. Who, though, needed this "rise"? By reducing the staff every year, we were now actually left almost unprotected. We do a minimal amount of repair work. In winter no one cleans the snow off the rails. Cases of snow packing down grew more frequent, with serious consequences. The small brigades work approximately two hours a day, since they hinder the trains.

In addition, scientific-technical progress also works directly against the railroad men. The speeds increase—the upper layer of the track wears out more quickly. The load on the axle grows—there is a sharp increase in the rails going out of order.

How is all this compensated? With almost nothing. The mechanization of the routine maintenance is imperfect, clumsy and old. Even the VPR and the VPRS are calculated to use type R-50 rails, and relatively clean ballast. Not at all, however, for using R-75 rails and cemented ballast, which we have, specifically, on the Kuybyshev Railroad.

All this has been going on for years, and the railroad men on the roads are faced with a constant dilemma: take any way of getting out of a situation, instead of new materials, lay old-style materials or use any deviations. All of this damps the enthusiasm of the people and breaks down discipline.

We know that all the basic work on the lines has long been regulated and that there are standard technological processes. They are used primarily for local conditions with certain changes. Ignorance of the technology by some workers on the track and by the transport workers sometimes leads to dangerous phenomena.

It appears that some road foremen, who have not gained from the director of the division a six-hour "gap," as is specified by the standard technology for replacing a switch assembly, ask for a three-hour one and replace—one line. A few days later they take another one, again for three or four hours, and change the second line. After all, however, this is essentially a crime! Therefore, the dispatchers have the idea that the switch can be changed in three hours.

Another example. While using a "gap" in major repair is under unremitting monitoring by a dozen commanders—from the brigade leader to the chief of the road—the use of a technological "gap" for current repair is essentially unmonitored by anybody. The usual market trade leads up to putting the object into operation: some people ask for a little bigger "gap," and others give a bit less or two very little ones.

It appears that there is no one to care about the efficiency of this work. If the representatives of other services were familiar with labor-intensive technological processes, mutual monitoring and mutual assistance it would doubtless be beneficial to the overall matter.

I cannot help but mention also the overall discipline in transport. There was a time when all the railroad workers at the work places would go about only in uniform. Then they thought: for some, uniform was obligatory, others were in uniform but it was not obligatory, still others could wear it or not, and yet others wore no uniform at all. It is easy to make a mistake in these "laws," which is what happened. Even in the ministry you rarely see the directors in uniform. What can be said, then, about the track sections and the stations? Often persons of both sexes meet and accompany the train almost in fancy dress. Only the hand flag or disk indicates that this individual is on duty and guaranteeing the safety of the traffic.

A great deal can be said today about the higher school. In the 15 VUZes in the country, from former students, they are training commanders of railroad transport, and are teaching discipline, duty and obligations to the people and the state. Most of the teachers, however—lecturers and professors—despite the instructions of the Ministry of Railways, disregard the uniform. The pupils and students, therefore, long before arriving at the production facility, have developed the habit of violating discipline.

If the theater begins with the cloakroom, transport begins with discipline, a uniform and adherence to orders, rules and instructions. One could also be reminded here of the teachers, even though in the railroad institutes they should know, as a minimum, the general course on railroads. Alas, many do not burden themselves with this knowledge.

The problems of safety can be solved only consistently, in a group, in all economic activities. For railroad men this is particularly important, considering the complexity of work with people on the track, at the crossing and at the bases.

I think that we must once more return to an important matter such as maintaining the tracks. We cannot do without it. Perhaps it is expedient to inspect the track less hastily, with track motorcars, individual locomotives or something else. In a word, if the track is the basis of transport, then it must be carefully tended.

Perhaps, not everything is indisputable in my reasoning, and it is possible that I am mistaken in some things. The problems of maintaining the steel rails and of ensuring reliable safety for the traffic, however, worry me greatly.

City Railway Transportation Problems Aired 18290134a Moscow GUDOK in Russian 18 Mar 89 p 2

[Article by N. Loginov and N. Tsurikov under the rubric "Return to a Topic": "Who Will Help the Electric Train?—Sounded from the Pages of GUDOK Over Five Years Ago, This Question Has Not Yet Found an Answer"]

[Text] First some statistics. Last year some 32 million passengers more than the prior year were transported on suburban electric commuter trains. Across the country a little under 4.4 billion people (more precisely, 4.396 billion) took all categories of trains over the year, of which almost a quarter took suburban and local ones running between oblast centers. That is, nine out of ten people traveled a short distance, the majority to work and back.

The cities are growing, and so is commuter transport. In many industrial centers of the country, by the way, the electric trains have become part of transport within the city as well. At the Moscow Junction station, for example, they deliver about a million people daily. The score is the same—tens and hundreds of thousands—in Kiev, Leningrad, Kharkov, Gorkiy and other major cities...

They say that movement is life. Long said on another score. But let's turn the statement to our topic—suddenly the trains runs die out. The very same ones on which we hurry (and, it proves, are late) to and from work. And at once the life of thousands of plants, mills and organizations dies out as well. And only then do we feel, do we truly understand, the fact of how accustomed we have become to what we do not notice.

We return, however, to the platform—of the train and of life. We are waiting for the electric commuter train. It should be here, according to the schedule. "Delayed," we hear on the radio. Or: "Postponed for technical reasons." The cars are at times without heat or light for the same reasons. Or without the one and the other at once. Or we just barely drag along due to...

There are so many of them, these reasons, questions, problems. We write about many of them in the pages of GUDOK, and our readers us too.

Steps are taken on the spot. The trains run faster for a time and conform to schedule, and then suddenly they begin to "stumble" once again. But how "suddenly" can it be if, for example, V. Zaviktorin has been signaling essentially the same thing for 15 years? The discussion concerns a chronic illness and, judging from everything, of more than local significance.

An attempt to diagnose it and prescribe a course of treatment was made in GUDOK more than five years ago in material titled "Who Will Help the Electric Trains?" (16 Nov 83). This title then became a rubric for a series of letters from the localities. Public opinion helped with the solution of some problems then. But today we are forced to turn to it again.

Why? It would seem that all the priority is on the side of the trains: a mass nature, profitability—trips using them are 1.2 times cheaper than electric locomotives and 1.5 time cheaper than diesel locomotives. The cities are moreover growing and the network of electrified lines is increasing from year to year.

"It is as if God himself commanded devoting special attention to electric trains," said the deputy chief of the Locomotives Main Administration of MPS [Ministry of Railways], A. Nesterov, talking about this type of rolling stock.

"Five years ago we talked with our colleagues," said Arkadiy Maksimovich. "We reported to GUDOK that our requirements for electric-train rolling stock were only half met. There have as yet been no particular changes for the better. About 20 percent of the whole fleet of railcars has been in operation for 25 years or more. Some 1,179 Sr3 railcars made in 1957-59 are functionally and physically obsolete and subject to write-off. And we are forced to patch them up repeatedly to cover gaps in our requirements. Over the last two five-year plans, the 10th and 11th, we were short by some 6,800 railcars from Mintyazhmash [Ministry of Heavy, Power and Transport Machine Building], and we are missing some 4,300 in this one from the level planned to meet the growing volume of suburban transport."

The Riga Railcar Building Plant [RVZ] is still the only one in the country that puts out electric trains. It supplies an average of 500 cars a year to the system. It breaks down like this over the last five years: 503 in 1983, then 474, 496, 502 and 537 last year. They plan to supply 555 railcars this year. A small addition...

True, a decision of the directive bodies of 29 May 86 envisages the reconstruction of the RVZ and the Demikhov Machine Building Plant. It has been proposed that upon completion in 1991 and in subsequent years, the output of electric railcars will be increased to 1,100. But the modernization of both enterprises is being delayed: only 77 percent of the funds allocated for construction and installation were assimilated over the last two years, and this year less than half the planned amount has been used.

A second no less and perhaps even more important circumstance that has called the doubling of railcar deliveries into question in the near future is the absence of additional capacity for the production of electrical equipment for these same railcars by the enterprises of

Minelektrotekhprom [Ministry of the Electrical Equipment Industry]. Operating in tandem with the railcarbuilding plant, the Riga Electrical Machine Building Plant—also the only one in the country giving life to the electric trains—is at the limit of its capabilities. It also needs modernization to increase deliveries.

Let's suppose that the enterprises of Mintyazhmash and Minelektrotekhprom solve their problems and transport will begin receiving 1,100 railcars a year, maybe not in 1991 but somewhat later. At the same time, according to the conclusions of MPS specialists, the Series ER-1 and ER-9 electric train railcars will have to be taken out of circulation in the 13th Five-Year Plan. Many of them are already 30 years old or more and elements of their compartments have been eaten through by corrosion, which does not ensure safety in operation. Their elimination from the operational inventory will increase the requirements for electric-train rolling stock to 13,300 cars. Simple arithmetic shows that even with the anticipated delivery of 1,100 cars, it will take 12 years just to eliminate this shortage!

"The prospects for 'entering' the 21st century in that fashion are not very joyful... What do you, Arkadiy Maksimovich, see as the way out of this difficult situation? We know of the appearance of a new series of electric trains. But we do not have double-deck cars on the lines, although they have long ceased to be a novelty in the West. We 'grow' in length: we had 8-car trains, now we have 10 or 12..."

"Yes, longer trains, lengthen the platforms. They already joke about how fast you can get from Moscow to Mytishi by platforms... The elongated ones are justified during rush hours."

An experiment was conducted 20 years ago in the Moscow-Kursk Division: they sent out elongated trains to the "fork," divided them in two there and sent them on in "halves," and joined them up again on the way back. They ran that way a few times and then rejected it—too much trouble.

Double (20-car) electric trains are running now on one of the routes of the Gorkiy Railroad. Good radio information is needed here so that there are no misunderstandings when the passengers get on and off. This experience was also illuminated at one time in GUDOK, and it is acceptable on other railroads as well.

Things are more complicated with the creation of double-deck cars. The motorized cars of the trains are stuffed with equipment—you can't "lower" the first level. It can be "spread out" up and down some on the trailer cars. But then the train looks like a camel—one car lower and another higher. In the West the double-deck cars run just with locomotive traction—electrical or diesel. We could employ such trains on inter-oblast connections where, by the way, there are no few electric trains in operation today.

"Perhaps that is a reserve, a way out of the growing shortage? After all, freeing up the electric train of a great burden, we could close a good ten 'offshoot' short runs on the schedule."

"Perhaps in the future," said A. Nesterov. "When we have enough passenger cars and those double-deckers. There is still a shortage here."

If there is an acute shortage of electric trains, if they have to be "whirled" around after themselves and be in short supply to the utmost, then they have to use many old, worn-out cars, and the base for their maintenance and repair should be developed all the more. And it is also lagging behind demand. The fleet of electric trains is assigned to 93 depots, 29 perform current repairs on a TR-3 scale, and only four satisfy the requirements of the technological process. The spaces are limited, the modern mechanization equipment can't even turn around in them, and the depots don't have enough of it anyway.

There is not one properly equipped storage and servicing base on the whole railroad network. The electric trains have no where to be washed in the winter, and their outward appearance thus provokes reprimands. During holdovers they are not protected, and get stripped or even suffer fires. Over 30 such incidents were noted last year alone.

Can we really talk seriously about attention to electric trains if over the last 15 years not a single multiple-unit car depot with a base for repairs on a TR-3 scale has been built? In the features "Who Will Help the Electric Trains?" published five years ago, it was mentioned that they intended to build major multiple-unit railcar depots at the stations of Danilov, Krasnoyarsk, Kharkov, Khabarovsk and expand the one at Nakhabino in the 11th Five-Year Plan. The fourth year of the 12th is underway and there have been no changes. One need not be surprised that the share of defective rolling stock has increased four times over since 1985.

And a capital-repair base? As there were five plants before reviving the electric-train sections, there remain five today. The feature noted that over 20 percent of the electric trains that required thorough "treatment" did not get to the plants. And now the need is only 77.7 percent fulfilled. Lines of 520 electric sections—roughly a hundred trains—are awaiting capital repairs. And next year they will have to pass some 800 more sections through the plant shops than this year.

The deputy chief of the Locomotive Repair Plants Administration of TsTVR [Main Administration for the Repair of Rolling Stock and the Production of Spare Parts], V. Dannenberg, convinced us of the significance of efforts being undertaken to increase capacity. Over the last nine years, however, the enterprises of this administration have been able to add just 300 sections to their annual repair program. Clearly insufficient.

The quality of the "treatment" is moreover not satisfactory at all plants. There are a great many complaints against the Tbilisi Electric Railcar Repair Plant. The operational workers sent rolling stock there only in extreme need.

They have been talking about this enterprise for so many years now (and previous features have talked about it as a slipshod operation), but nothing has changed. There was a hope among the locomotive people that the conversion to economic accountability and self-financing would force the plant workers to instill order. Judging from everything, however, the economic mechanism in the repair-enterprise system is such that it allows even chronically slipshod workers to avoid bankruptcy.

Things are no better with the renewal of the basic equipment. It must be asserted as before that the plants are restoring far less than the required amount of it, and for certain types the requests of the railroads are not even accepted. Equipment and spare parts for electric trains that have been operating for over 20 years is not even produced. The rolling stock of later manufacture is supplied with far less than the required amount of spare parts.

Suburban electric transport is unprofitable, and thus the transport workers are willy-nilly trying to economize on the upkeep and repairs of electric trains. All of this accelerates the "finishing off" of the electrical rolling stock and aggravates its already unenviable state.

So how can the electric trains be helped? It seems that first and foremost the economic mechanism must be adjusted so as to extract commuter transport from the ranks of the unprofitable.

Additional possibilities for solving this problem are revealed with the incorporation of territorial economic accountability. The electric trains, after all—as has already been noted—are part of intra-city (and oblast) transport. So why not involve the local budgets more actively in it, the more so as it is in the interests of the regions themselves and all who live there?

And in general, why should the concerns of electric trains—a mass form of transport that is used by the workers of all oblasts—be placed on the shoulders of the railroad workers alone? Common problems, the more so under the new conditions of economic operation, must be solved together.

Problems of Increasing Axle Load Examined 18290140a Moscow GUDOK in Russian 25 Mar 89 p 2

[Article by Yu. Voloshko, doctor of technical sciences, and V. Rybkin, candidate of technical sciences: "But the Cheapness Is Imaginary"

[Text] Dnepropetrovsk—A year ago Decree No 367 of the USSR Gosstandart [State Committee for Standards] set the maximum axle load for freight cars at 24 tons. What does this mean for the railroads and how do we ensure adherence to this decree? There are no clear answers to these questions.

Increasing freight car axle loads has always been very tempting, since it has made it possible to increase the productivity and efficiency of transport without additional capital investments. Especially as the cars and tracks, like any structure, have a specific margin of safety. It is explained not so much by the fear of making a mistake in assessing structural strength (modern methods of analysis and calculation make it possible to do this quite accurately) as it is the large and objectively substantiated variation in the characteristics of cars and the track and inadequate control over car loads.

Testing of cars and the track under increased axle loads was conducted in the 1970's at an experimental section in Shcherbinka by the VNIIZhT [All-Union Scientific Research Institute of Railroad Transport]. And although neither the track nor the cars were prepared for the transition to more rigorous operating conditions, the MPS [Ministry of Railrays] decided in 1985 to increase car loads up to 75 and 80 tons, which amounts to an axle load of over 25 tons. This decision was temporary and was based on a noble objective—to fulfill the transport plan in the 11th Five-Year Plan.

However, the decision on increased car loads is still in effect. In March last year it was extended again. The temporary step has become a permanent one. Then the MPS charged the VNIIZhT and transport VUZes with conducting proving and operational tests of existing rolling stock and track structure on sections with increased axle loads. It was proposed that cars loaded up to 80 tons be used on isolated sections and that trains with such cars be operated at lower speed.

But these requirements often have not been observed. Measurements on a wide scale in different regions of the country have shown that up to 20 percent of the car axles in trains are sometimes overloaded by one-third of the norm.

Where will this increased loading of cars lead? According to the Lines Main Administration, the isolated malfunction of rails and switching elements increased by more than 30 percent over the past 5 years. The number of joints and ties that have broken down has increased and cases of track displacement have become more frequent. The number of cases of bank settling and fatigue damage to bridge spans has increased markedly. The number of "unsatisfactory" kilometers has increased by 70 percent and the length of track with warnings about speed restriction has been tripled. And a reduction in the service life of individual elements of the track structure has led to a shortening of the periods between track maintenance.

All this is taking place at a time when 16 percent of the track length is worn out, as they say. Repair work is not being carried out here because of the lack of materials and insufficient manpower. In addition, the norms for

the length of time between repairs are based on less loading and do not take into account the changed operating conditions, the increase in cars' axle loads in particular.

And how are the line subdivisions being financed? Very poorly for many years, and sometimes even two times worse than required by the norms. The situation is being corrected now, but not everywhere, not to the full extent, and slowly. All this has led to a situation in which there are no resources or opportunities to carry out preventive operations for current maintenance of the track in subdivisions. They are oriented only to a run by a tracktesting car and eliminate the flaws it brings to light.

Considerable hope has been placed with mechanized track maintenance. However, this is a matter for the distant future; at present the level of mechanized operations in the majority of subdivisions barely reaches 40 percent. Out of 32 types of machines necessary for current maintenance, only 13 are being turned out on a production line. The others are received in very limited quantity or are still generally being developed.

Deterioration of track conditions is continuing despite the fact that additional funds have been allocated for track maintenance. There are various reasons for the decline in track reliability, but to a significant extent this has been a consequence of the system experimenmt to increase car axle loads.

Similar problems have arisen with the railroad cars. Each car rated for 62 to 63 tons is authorized to carry 75 tons, and each car rated for 69 to 71 tons is permitted to carry up to 80 tons. Because of this the intensivity of wear and tear of the journal assembly has sharply increased and the number of defects in truck elements has increased, and as a result, the amount of car repair and the times to repair them have increased. This has led to a worsening of such indicators as average speed and car turnover.

Experience in operating the cars and using the track under an increased axle load (since 1985) has shown that defects of a fatigue nature are manifested more and more intensively. But the existing standards for inspection and defectoscopy of the track and rolling stock do not take into account the changed operating conditions and do not guarantee that defects will be discovered. Tests of fatigue strength are not being conducted on the track structure or the rolling stock, and this is not required by the standards, specifications, and norms in effect.

The lengthy period for the development of signs of fatigue provides grounds for predicting an even more intensive increase in defects in the track and truck elements in the coming years. Hence the main consequences of increasing the cars' axle load will become apparent in the near future. Neglect of the track will

increase even further. What has seemed to be the cheapest direction to intensify the transport process will require additional and very substantial capital expenditures and operating expenditures for the track and the cars.

But what is most important is that the reliability features of the track and the rolling stock will decline at the same time, and as a consequence, so will traffic safety. All this will lead to a sharp increase in the number of speed restriction warnings, which cut off the benefits from increasing the car loads. Only careful preparation of the track and the cars for the introduction of increased loads will make it possible to reduce the additional expenditures in the future. And one more indispensable condition for this step is to bring the norms for labor input, materials consumption and the lengths of time between repairs into conformity with this.

To sum up what has been said, we can draw the conclusion that the track has proved to be unprepared for an increase in car axle load at this time. The same applies to the cars, however. But after all, the MPS is oriented toward their further increase in its plans, since the plants manufacturing the cars have already begun production of bodies for gondolas with a capacity of 83 to 85 cubic meters. More than 7,000 of these giants have already been turned out. In the near future, it is planned to begun production of other cars with increased capacity, although the trucks with a higher allowable axle load for them are not ready yet.

The consequences of these insufficiently considered decisions will lie to an even greater extent on the shoulders of the persons working on the tracks and the cars. An increase in axle loads should be provided for by appropriate capital investments, that is, by the financing of operating expenses, material resources, and technical standards for the track and the cars. All this should be done before increasing axle loads.

How can this be? After all, railroad transport is obliged to provide for the growing requirements for the transport of national economic freight. Increasing the productivity of the lines and intensifying transport is one of the main directions in developing transportation.

We believe that a scientifically grounded economic program based on accurate calculations is needed first of all. Is it advantageous or not to increase the axle load? If it is advantageous, what are the limits, what additional expenditures will be required for this? Otherwise, it is impossible to work out a correct strategy.

And for some reason it never occurred to us that the imaginary cheapness of increasing cars' axle load can turn into even greater material losses.

TEP-80 Locomotive Production Noted
18290140b Moscow GUDOK in Russian 27 Mar 89 p 2

[Article by N. Modestov: "'0001' Sets Out"]

[Text] Kolomna—New locomotives are not developed often. Especially ones like the TEP-80 superheavy locomotive. There are none like it in world railroad transport today. And it is noteworthy that the first tests of the new locomotive coincided with the 125th anniversary of the Kolomna Diesel Engine Manufacturing Plant.

Because of the plant's difficult situation in recent years and the lag in many plan indicators, it has seldom been mentioned. Unless a vivid example for criticism was needed.

These reproaches were absolutely justified, but analysis of them is a special discussion. Now everything is being done at the Kolomna plant to get back the enterprise's good reputation and to bring it out of its slump. And in realizing this, it would not be fair to pass over the plant's interesting history.

The plant was organized by the talented Russian military engineer A. Ye. Struve. Originally his shops were intended to erect bridges across the Oka and Moscow Rivers. But life introduced its corrections: rail transport was developing rapidly in Russia. The pace of its development was even faster than in the most advanced country of that time, England. And soon a powerful machine building plant with broad specialization made its appearance on the river bank.

They were making steam engines, railroad cars, water towers, steamboats, icebreakers, turntables for steam engines, and powerful steam cranes in Kolomna. For many years, the plant was the only enterprise in Russia building bridges for rail and urban transport. There are few who know that the Kolomna specialists in the last century built the Krasnokholmskiy, Krymskiy, Borodinskiy and Moscow River bridges in Moscow, linked the banks of the Dnepr in Kiev, erected the Liteynyy Bridge in St. Petersburg and the bridge across the Oka at Murom. They built the vast Dvortsoviy Drawbridge in Petrograd in 1915.

All the same, the main thing the Kolomna workers have always been rightfully proud of is railroad transport. Steam engines of the most diverse types and specialization, electric locomotives, gas-turbine locomotives, diesel engines... Today the plant is the only enterprise in the country that is turning out diesel engines for passenger trains.

The period of 125 years is too long to compare it with one human life. Many generations have been changed at the plant. Those who stood at the sources of the enterprise's rebirth during the years of the first five-year plans have long been gone. And those who turned out tanks,

"Katyushas" [truck-mounted rocket launchers], self-propelled artillery pieces, and shells in unadapted shops in our state's most difficult period—the Great Patriotic War—have left on a pension...

D. M. Dutikov and V. S. Kharitonov are the oldest workers in the diesel engine assembly shop. They have been working here as fitters since 1946, since they came home to Kolomna from the war.

"We had to start from nothing," recalls D. M. Dutikov. "The equipment was worn out, and the shops had not been maintained for a long time. How long was it? There were not enough tools or specialists. Many did not return from the front...

"We worked tirelessly, and we rested at odd moments. There were beds in the Red Corner. We slept there in order not to lose time on the road home. The country raised itself from the ruins and built a peaceful life. It had to have equipment. And the Kolomna workers did everything for this."

"We were exhausted," says V. S. Kharitonov. "It seemed we just fell asleep when it was time to get up and go to work again. We did a great deal by hand. I was a specialist in pipes. All steam engines left the shop with my pipes. And we made 30 of them in a month. Think of that, a steam engine in a day—is that a lot or not?"

"And not long ago we recalled our younger days," Viktor Sergeyevich continues. "They brought an old steam engine home to the shop. They want to put a monument at the entrance. They asked us, the old men, to help get the steam engine in shape. Mikhaylich and I walked around it and cleaned every screw as if it were our own..."

In the shop with the 60-year-old man was the new TEP-80 superheavy locomotive, and the work was taking its normal course. The sparks were flashing from the arc welding, the overhead crane was rumbling, and the mechanics were arguing about something after installing something in the locomotive.

"Putting a new diesel engine together is a very important job," says V. Stepanov, deputy chief of the diesel assembly shop. "We are realizing the many years of work by thousands of persons—engineers, designers, mechanics... Moreover, the new locomotive costs a great deal—about 2 million rubles. We want to run it in more rapidly, to see it in series production, and to put it to good use."

And the exterior of the TEP-80 looks quite different from its predecessors. Not only by the number which attests to its uniqueness—"0001." The locomotive is more powerful than the TEP-70 and TEP-75, develops more speed, and can handle a consist of cars nearly twice as long as today's normal passenger train. But it is still a

long time until it is put into series production. First the tests and running it in for thousands of kilometers, and then the finishing work on individual assemblies.

Accident, Hazardous Materials Exercise Conducted

18290140c Moscow GUDOK in Russian 27 Mar 89 p 4

[Report by GUDOK correspondent A. Durov: "A Wreck According to Schedule on the Kadala-Chernovskaya Line of the Transbaykal Railroad"]

[Text] Chita—Exercises on such a scale have never been conducted on the rail system. The tragic events recently in Armenia, Arzamas, and Sverdlovsk finally forced us to soberly assess the country's system for saving lives and coping with the consequences of major natural disasters and those caused by man. Speaking of the latter, alas, there have been quite a few on the railroads. It is now clear to all of us that the numerous state and public rescue units and the extensive resources to maintain them in themselves do not guarantee effective actions in extreme situations. Not to mention the sea of orders and instructions that are incapable of preventing disastrous wrecks, much less of rescuing the persons that have come to grief.

Incidentally, on the instructions. When they prepared for these exercises on the Transbaykal Railroad, which were held under conditions as close as possible to actual conditions, a paradoxical situation took shape: the chiefs of some subunits in the Chita Division categorically refused to "arrange a wreck," even on an unused spur line, referring to the instructions, which "say nothing about this." The exercise organizers, N. Babeshko, A. Lavrinaytis, and G. Kabanov, had to contrive everything possible to make it all "real."

And this is how it was... At exactly 0350 hours on 17 March, as noted, there was a freight train "wreck" on the Kadala-Chernovskaya line of the Transbaykal Railroad. Two enclosed cars derailed and caught fire and a tank car containing a powerful toxic substance fell down the bank.

A passenger train was approaching on the adjacent track from the opposite direction at this time. The engineer applied emergency braking, but the train passed the danger spot and picked up speed again. But the last two cars "came uncoupled and derailed" and remained in the wreck area.

When the chief of the Chernovskaya station received a radio message from the passenger train's engineer, he reported what had happened to the Chita Division. The division chief immediately sent an investigation group from the line's subdivision by a special handcar to determine the danger of toxic contamination from the

overturned tank car. A firefighting train left for the scene of the wreck. By this time they had learned from documents that the tank car contained highly toxic liquid ammonia.

The dense, toxic ammonia fumes caught by the wind moved slowly across the steppe toward the airport. Those two uncoupled passenger cars, in which there were "dead and injured," also turned out to be in the contaminated area. The group commander, Ye. Danilova, realized that the situation had become extremely dangerous and that conducting any operations under such conditions without special equipment and means of protection was unthinkable. It became clear that the railroad workers were not coping with the effects of the wreck through their own efforts. And then the civil defense headquarters in Chita was notified.

Meanwhile, the "passengers" managed to get out of the contaminated area by themselves and with the aid of firemen. A first aid detachment from the division hospital and medical units from the railroad's enterprises had been called out. More than 300 persons were involved in response to the "wreck," which had acquired the scope of a major operation.

The exercises were conducted on the Transbaykal Railroad not only because of events in other parts of the country and the ministry's orders. They had their own reasons as well after being nudged into action. On 2 December last year, after a consist was separated at the Belogorsk station, a car with a dangerous load collided with other cars. They avoided serious consequences. There have been seven emergency situations over the past 6 months on the railroad involving powerful toxic substances. Two of them led to slight poisoning of several workers. It must be said that the Transbaykal Railroad is more fortunate than other lines in the system in this respect.

Meanwhile, events on the "wreck" test track have developed rapidly. A special mobile detachment under the command of Lt Col V. Gurskiy arrived. Soldiers in protective clothing cordoned off the danger zone. A separate radiological and chemical reconnaissance platoon rushed to the center of the contaminated area in three airtight armored personnel carriers. In several minutes tests were made and the dimensions of the area affected by the toxic spill and fumes were determined. The armored personnel carriers fenced off the contaminated area with bright yellow flags at high speed with the aid of a unique pyrotechnic device. Automatic spill systems (ARS) put a screen of water near the tank car and began degasification and decontamination of the affected area. A wheeled power shovel dug a hole for the spilled ammonia, which had begun to be diluted liberally with water. The automatic spill systems attempted to put out the fire from the flaming cars...

The entire section of track for the exercises was in full view from the well-equipped command and observation post. They had set up portable radio transceivers and field telephones here enabling them to communicate with any railroad, oblast, or military authority, and a vehicle on a hill with a large metal dish on its roof provided for communication with distant Moscow.

Those in charge of the exercises—G. Kabanov, deputy inspector for line traffic safety, and Col V. Lyashenko, commanders of the civil defense subunits of the Transbaykal Railroad and Chita Oblast—were at the command post. Using on-the-spot radio reports coming from the armored personnel carriers continuously moving about the contaminated area, Lyashenko explained what was taking place at a given moment on a large model.

They had pumped the remainder of the liquid ammonia out of the tank car into a special reservoir and they had deactivated the spilled toxic substance. But the automatic spill systems did not manage to cope with the burning cars. And then the railroad firemen undertook the task. The watch chief, P. Korovin, put modern foaming agents into action, and in a few minutes the fire was put out. Now it is necessary to open the section for train traffic. It was the restoration train's turn to work.

While these events were taking place, the medical units from locomotive and car depots arrived, and began not too skillfully to bandage the "wounded" and evacuate the passengers, a role played by soldier extras. All the "victims" were taken to the nearest station, Chernovskaya, where the first aid detachment of the division hospital was deployed: 10 passenger and freight cars—initial treatment, traumatology, surgery, and other treatment. The chief of the detachment, Ye. Eduardova, had prepared the train on the spot to receive the "wounded" and "contaminated" and thought a little about the "dead" as well...

The large-scale exercises became a good school for developing interaction between the railroad workers and the special military civil defense subunits. This was noted by those in charge of the exercises during the critique. Until now the military men had trained only by themselves and the railroad workers had not taken part at all in combined training under complicated circumstances.

For all those invited it was an impressive "performance," many "scenes" of which were so natural that they forced them to think: God forbid that we should really be in such a situation. The good technical equipment and high training of Lt Col Gurskiy's soldiers were impressive. Hoseman P. Leontyev from the Chita fire-fighting train worked efficiently and well in extinguishing the car fire. During a fire in a school 4 years ago, he saved several children and was awarded the medal "For courage in a fire." In a word, the professionals proved themselves well.

But why during the critique did the exercise organizers have occasion to raise their hands in a helpless gesture from time to time and frequently recall Armenia, Arzamas, and Bologoye?..

There were some conditional aspects of the exercises, of course. For example, the special mobile detachment, without which it was impossible to begin coping with the consequences of the "wreck," would have arrived on the spot in 6 or 7 hours. And even the "performance" here showed that the number of casualties would have increased in the very first hours. The soldier extras depicting the wounded were frozen stiff from the cold waiting for first aid from the medical units.

It is completely clear that in such a situation, the railroad workers from the special civil defense subunits formed recently and the firefighters will have to get the victims out of trouble first of all. But neither one of them now has sufficient protective equipment and hardly any apparatus for efficient chemical control. But it could be even worse. Public railroad units are so poorly trained that they could do practically nothing in a contaminated area without subjecting themselves to danger.

"Healthy men without good training in our protective clothing and insulated masks begin losing their strength in intensive work after 15 or 20 minutes," A. Lavrinaytis, one of the exercise organizers, said. "And what can we say about the women?

The British, French, and Swiss firemen and rescuers who worked in Armenia were mentioned several times in the critique. They were excellently equipped and trained and were truly mobile. We also understand now that we must count first of all on trained professionals, not on public units. And not only to put out the fires and to cut and pull the cars apart.

Restoration and firefighting trains which have all the necessary equipment and technology and highly paid personnel with all-round training—this is what the railroads must have to cope practically with wrecks and disasters. This is the principal lesson from the exercises on the Transbaykal Railroad.

Hazardous Materials Incident Detailed

18290134b Moscow GUDOK in Russian 18 Mar 89 p 2

[Article by G. Matetskiy, Achinsk: "An Incident-Hours of Alarm"]

[Text] This occurred on the last day of February at 7:40 PM local time. While transferring some containers that had come from the Saki Chemical Plant on the Dnieper Railroad, the bottom of one of them ruptured. Some 42 cylinders with methyl bromide fell in a heap like enormous cucumbers from a bag.

The crane operator and stacker reported what happened to the dispatcher. People were evacuated from the container area and it was sealed off by the police. The chief of the Achinsk Division, A. Royshteyn, the chairman of the city council ispolkom, Y. Dutchak, firemen, representatives of the health inspectorate and then the chief of staff of civil defense, V. Mikov, all came to the station.

The danger was great. Methyl bromide is a liquified gas employed to process grain and grain products, as well as to treat the equipment at bakery-products combines. Its toxicity factor is designated as the unit value, that is, the highest degree. If this had occurred in the summer, the liquified gas would have begun evaporating rapidly as it leaked. They would have had to evacuate not only the Achinsk-2 Station, but the entire population around as well. Matters did not reach that point only because it was winter.

By three o'clock in the morning all of the cylinders, including two from which leakage of the liquified gas had occurred, had been loaded into a different container. A truck took them outside the city, and then dispatched them to Krasnoyarsk and the consumer, a crop-protection station.

Over six hours passed from the moment of the accident to the elimination of its consequences. This incident revealed a complete lack of preparedness for such situations. There is, it turns out, essentially no emergency service in the city.

The railroad workers did not act very intelligently from the very beginning. The dispatcher should have first reported the accident to the civil defense headquarters. In this instance they were only phoned after 40 minutes.

When the executives of the city and the railroad division arrived on the scene, it turned out that there was no emergency breathing apparatus or skin protection for those who were to eliminate the consequences of the accident at a station where many tons of dangerous chemical freight pass through every day!

The railroad workers themselves were simply unprepared to operate in this situation. The firemen also proved not to have this equipment. There was no degassification equipment on hand either.

Time passed. They sent for the gas-emergency service of a petroleum refinery that was located almost twenty kilometers outside the city. There were four gas-emergency personnel on duty there. They left two at the refinery and brought two to the station. They began training the firemen on working with the dangerous liquid right on the spot. That took time as well...

But why did the bottom fall out of the container? It became clear upon investigation that one of the four beams it rested on was missing altogether, while two others were welded to the frame any which way and, unable to hold the load, broke off. Container No. 516708929 had been built at the station of Gryazi of the Southeastern Railroad. Thus it would seem that an inoffensive piece of factory junk was almost the cause of a tragedy.

MARITIME AND RIVER FLEETS

Work of Maritime Rescue Center Highlighted 18290171 Moscow VODNYY TRANSPORT in Russian 25 Mar 89 p 2

[Interview with G. S. Leontyev, chief of the USSR State Maritime Rescue Coordination Center, by A. Kuznetsov: "The Lifesaver Comes to the Rescue"]

[Text] Last year the USSR ratified the 1979 International Convention on Maritime Search and Rescue. The functions of coordinating the activities of Soviet ministries and departments, as well as of foreign states, indicated in the convention have been entrusted to the MMF [Ministry of the Maritime Fleet]. A USSR State Maritime Rescue Coordination Center has been established, headed by G. Leontyev.

[Kuznetsov] Gennadiy Serafimovich, how do you explain the fact that 10 years elapsed between the signing and the ratification of the international convention?

[Leontyev] By the paradoxes of the stagnation. The point is that ratification in practice means joining the international convention, and hence the establishment of an appropriate organization. In other words, a center in its present form. So 25 persons were required for it in Moscow in 1979. The USSR Ministry of the Maritime Fleet did not agree to this. The USSR Council of Ministers as well, after approving the decision, "forgot" about putting it into practice. So they marked time for 9 years. Restructuring moved the matter off dead center.

We now have a staff of 16 in our organization; nine stand duty at the main console around the clock, five are engaged in organizational work, and two are in office work. And about 50,000 persons altogether are employed in the country's rescue service.

[Kuznetsov] Tell us why such an organization was established if rescue operations were carried out before by expeditionary detachments which existed in nearly all the shipping companies. What is this? A tribute to fashion or an administrative itch to restructure?

[Leontyev] Neither one nor the other. The point is that coordination of the efforts of all ministries and departments was required: the Ministry of the Maritime Fleet, the RSFSR Ministry of the River Fleet, the USSR Ministry of the Fish Industry, the USSR Ministry of the Petroleum Industry, the Navy, the Ministry of Civil Aviation, and the Air Forces, as well as the USSR Ministry of Health. They were united before the center was organized as well, of course, but on the basis of

voluntary arrangements among them. For that reason it often turned out that everyone pulled in different directions, as in the well-known Krylov fable. The principle of voluntary action exists now as well, but in the first place, the USSR Council of Ministers has put the rescue services and facilities under the aegis of the Ministry of the Maritime Fleet, and secondly, we are now drafting documents on its instructions to unite the rescue forces and facilities in one jurisdiction.

Some think that we need to establish a unified state rescue service. Professionals have concluded that this is pointless. It will become huge, cumbersome, and poorly managed, with an unwieldy bureaucracy and unnecessary centralization. There would be many levels of authority from the point of an accident to the making of a decision, a palisade difficult to cross. And this is a loss of precious time where human lives are involved.

[Kuznetsov] It is no secret that with all the good intentions, the poor degree of technical equipment and the lack of highly skilled specialists also become an insurmountable obstacle in work such as lifesaving at times, unfortunately.

[Leontyev] Yes, as painful as it is, but we are now reaping the fruits of many years of a devil-may-care attitude toward the saving of human lives. We need only remember the "Admiral Nakhimov" tragedy.

The situation is changing now. The Ministry of the Maritime Fleet has already allocated 1.5 million rubles to purchase diving equipment. But this is a drop in the ocean. After all, this involves the entire range of facilities needed. If we are speaking about orders for the rescue service, it is a question of hundreds of millions. For this reason, taking into account that we do not have the means to buy everything at once, we have adopted organizational rules: send everything available in a given water area to the area of distress without any excuses whatsoever. This is the main principle on which our center builds its work. We also involve the USSR Ministry of Internal Affairs, the USSR OSVOD [Society for Rescue on Waterwaysl, the DOSAAF, and the union republics' ministries of housing and municipal services in coordinated action.

[Kuznetsov] It is common knowledge that relationships between the rescuers and the shipping companies are not taking shape without difficulty. The money which the shipping companies are obligated to pay for services is at the basis of the differences.

How is this problem to be resolved by satisfying both sides?

[Leontyev] Under the convention, we are obligated to provide assistance to everyone and without charge. If we save a ship and its cargo, we receive a financial reward in addition to recovering expenses for the rescue. This is why we should consider carefully how to get off the neck of the enterprises. I think the most acceptable alternative is to depend on state financing. At least there are many similar situations in the world. You will agree that we cannot build our incomes on people's misfortune. Our main objective is to save them, not to ask about their credit risk.

Another alternative is to reduce the sum collected for the state budget from the shipping companies which have rescuers in the amount of the funds they spend on this. This alternative seems the most expedient to me personally.

I am saying specifically that there have been no refusals of our services in any shipping company, and everyone understands that one cannot insist on a price when people are rescued. But why hide it, there is a certain dissatisfaction and lack of understanding.

As an example, the Americans asked us for assistance in searching for two missing motor boats with seven hunters on board in the Bering Sea. The diesel ships "Nizhneyansk" and "Dzhurma," the diesel electric ship "V. Arsenyev," and the "Bodaybo," "Kansk" and "V. Sitnitsa" were included in the search. Overall coordination of the search was handled by the search coordination center of the U. S. Coast Guard in Juneau, Alaska. The coordinator of the above-water search was the captain of the "Nizhneyansk," V. Sergiyenko. He defined the area of search on the spot and set specific tasks for each participant.

Vessels and an Il-14 aircraft of the border guards conducted a search in coordination with us at the same time. I will note in particular that authorization was received for the first time for a search to be conducted over our territorial waters by aircraft of the U. S. Coast Guard. During the operation we maintained continuous contact with the Americans' rescue coordination center.

The joint efforts were not conducted in vain. In several days the last ship, the diesel vessel "V. Sitnitsa," left the search area. But soon afterward the hunters approached the northeastern part of St Lawrence Island and were taken away by a passing American ship. All the hunters were well. We consider the results of the operation to be positive—after all, persons were rescued as a result. But the expenses for the vessels involved here amounted to 106,261 rubles. They were a heavy burden on the shipowners' incomes, of course. But what can be done?

[Kuznetsov] This is probably not the only case when our sailors, in displaying their loyalty to the maritime fraternity, have gone to the aid of those in distress in the limitless ocean expanses.

Incidentally, how is the interaction with foreigners being developed now? Are there any changes?

[Leontyev] Fundamental ones. Agreements on coordinated action have been concluded with Norway, Sweden, Finland, the GDR, Poland, Bulgaria, Romania, the DPRK, and Japan, and recently with the United States. We are now building bridges with Turkey. This is how the agreements actually work. A Latin American motor ship was in distress in the Atlantic. The Japanese heard an SOS and passed it on to us. From their aircraft, the Americans directed a Soviet ship, which took off the crew. Then an American patrol approached and our sailors transferred the persons that were rescued.

[Kuznetsov] Gennadiy Serafimovich, how is the extent of the rescue service's technical equipment being changed?

[Leontyev] We recently acquired 10 vessels capable of carrying out overall rescue work, extinguishing fires, and coping with ecological disasters. We have 45 altogether.

A scientific and technical program has been worked out to modernize and improve emergency-rescue equipment in which three dozen ministries and departments are taking part. The documents for organizing these operations have been brought up to date and brought into conformity with the actual situation in the water areas locally. Our ships are on watch at sea, and the schedule for emergency-rescue readiness in maritime areas is approved by the deputy minister.

Work has begun to establish an automated maritime dispatch system utilizing a computer and we are developing a program for efficient search and rescue at any point in the world.

And the main thing is that the Regulation on the Procedure for Allowing Foreign Rescue Vessels Across the USSR State Border has been approved by a decree of the USSR Council of Ministers. That is, this is the first step which we did not bring ourselves to take, in spite of the need for it, essentially for the past 70 years. Now the use of all national and foreign forces and facilities has been provided to rescue those in distress at sea.



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